

VICTORIAN YEAR BOOK 1972

Number 86

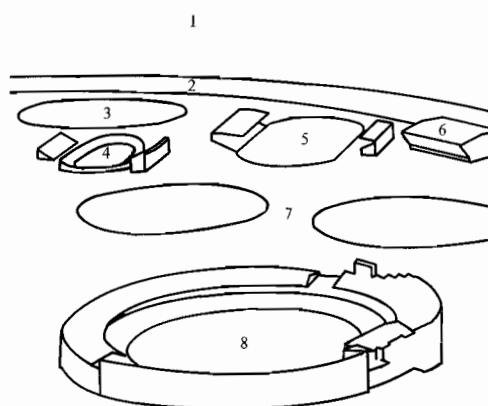
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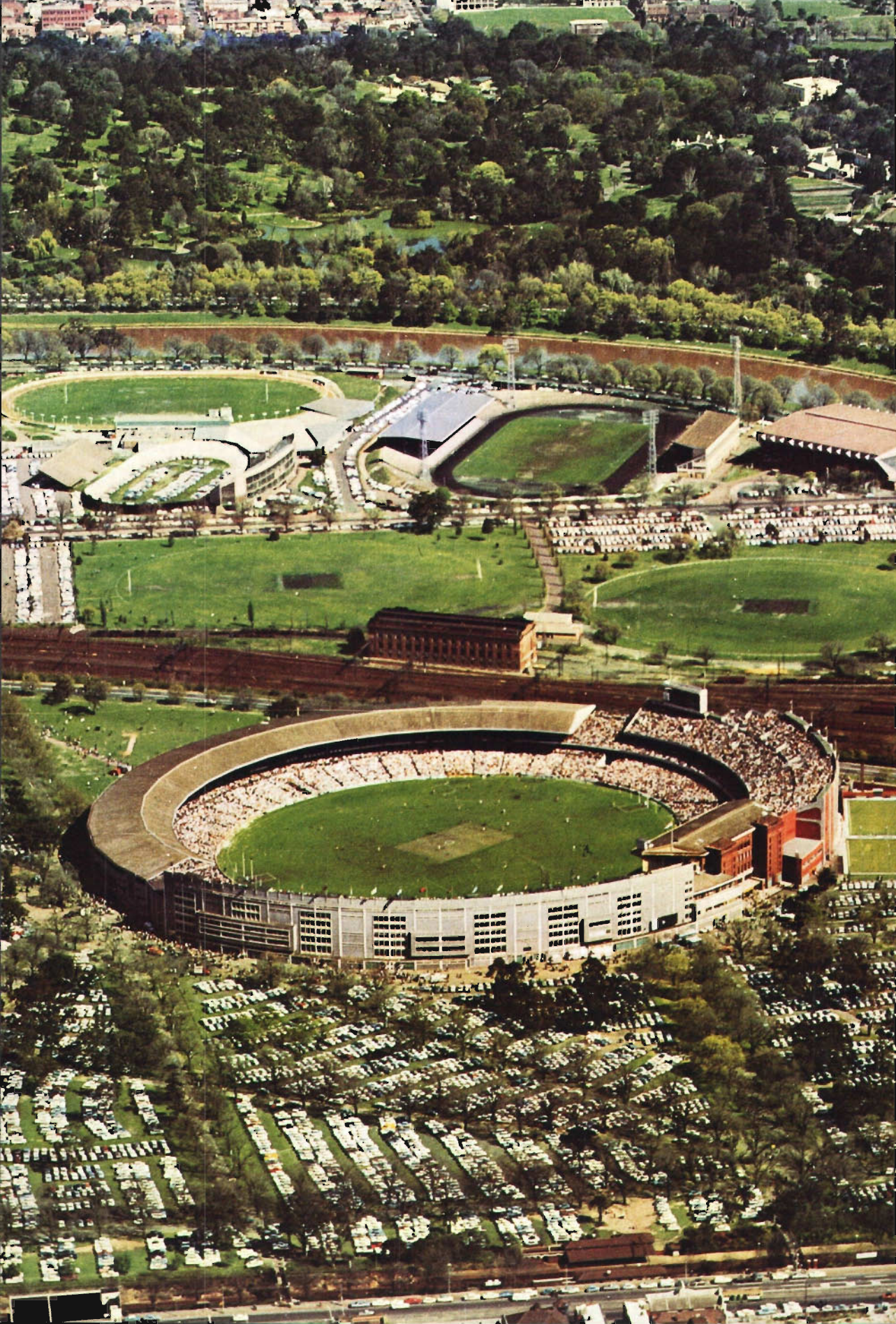
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The Melbourne Cricket Ground during a Victorian Football League Grand Final showing Yarra Park, Olympic Park, the Yarra River, and the Royal Botanic Gardens.

Leslie Thompson Photography



- | | |
|--|-----------------------------|
| 1 Royal Botanic Gardens | 5 Olympic Park No. 1 Ground |
| 2 Yarra River | 6 Olympic Swimming Pool |
| 3 Olympic Park No. 2 Ground (Greyhound Racing Track) | 7 Yarra Park Ovals |
| 4 Olympic Park Velodrome | 8 Melbourne Cricket Ground |



VICTORIAN YEAR BOOK 1972

V. H. ARNOLD, F.I.A.

*Deputy Commonwealth Statistician
and Victorian Government Statist*

Number 86

COMMONWEALTH BUREAU OF CENSUS AND STATISTICS
VICTORIAN OFFICE

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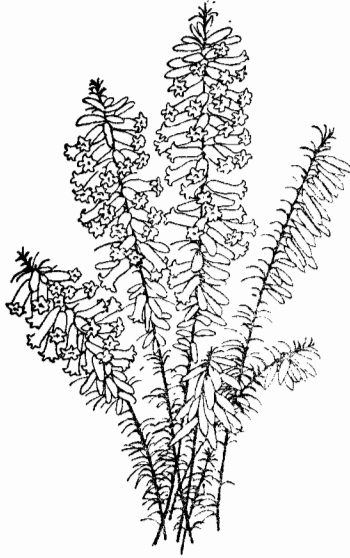
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The form of the Pink Heath, *Epacris impressa* Labill., was proclaimed on 11 November 1958 by the then Governor of Victoria, General Sir Dallas Brooks, to be the Floral Emblem for the State of Victoria. This plant was chosen as the result of a number of surveys made throughout Victoria by the Field Naturalists' Club of Victoria, the Tree Planters Association of Victoria, and kindred organisations and the metropolitan press, over a period of some twenty years.

PREFACE

This eighty-sixth edition of the *Victorian Year Book* again aims to present a comprehensive and faithful account of life in Victoria today. In attempting to achieve this objective, the *Year Book* reports upon important State activities and in particular upon the major social, political, and economic developments and trends of the State.

Continuity, especially of statistical information, is preserved as far as possible so that the *Year Book* will fulfil its function as a reference work. Consistent with its basic purpose, the coverage of the book is wide and hence, of necessity, its treatment is broad. Therefore, the statistical tabulations, which are supplemented by descriptive text, graphs, maps, and photographs, are comprehensive rather than detailed. The specialist reader will, however, frequently wish to pursue a subject further and hence to refer to other publications issued by this Office. These are listed in Appendix G and, as opportunity presents itself, are expanded to incorporate a steadily increasing amount of statistical information. They may be obtained from the Victorian Office of the Bureau, which also provides library facilities where the public may consult a wide range of statistical references.

The statistical tables in the *Year Book* give the latest facts available at the time the book goes to press. However, because of the time required for various phases of editing and printing, later information on a particular topic is often available in other publications. Readers should be aware that rounded figures sometimes cause small discrepancies between totals and the sums of components. Yearly periods shown as, e.g., "1970", refer to the year ended 31 December 1970; those shown as, e.g., "1969-70", refer to the year ended 30 June 1970. Other yearly periods are specifically indicated.

This edition again contains a number of new articles and hence some of the material published previously has been omitted. To help in tracing such omissions, references retrospective to 1961 are given both in the places where the articles last appeared and, in the case of major articles, in Appendix H. These references show the year of publication and the page number.

The material in the *Year Book* has been carefully checked throughout, but I shall be grateful to those who will be kind enough to point out defects or make suggestions.

Readers requiring the main statistical information of the *Year Book* in a concise form are referred to the *Victorian Pocket Year Book* which is usually published in July of each year. Copies can be obtained from the Victorian Office of the Bureau.

A number of persons and institutions have again helped in the preparation of the *Victorian Year Book* ; I express my thanks to them in detail in the following pages.

V. H. ARNOLD

*Deputy Commonwealth Statistician
and Victorian Government Statist*

April 1972

ACKNOWLEDGMENTS

The preparation of this *Victorian Year Book* has been a complex undertaking which would not have been possible without the willing co-operation of many persons and institutions in the community.

First, I wish to thank members of my own staff who have pursued their task with great enthusiasm and have again endeavoured to make the *Year Book* a true reflection of Victoria's activities today. It has been edited by the Editor of Publications, Mr H. L. Speagle, M.A., B.Ed. The revision, compilation, and tabulation of statistics have been the responsibility of the two Assistant Deputy Commonwealth Statisticians, Mr N. Bowden, B.Ec. and Mr R. O. Spencer, and the supervisors working under them : Mr J. F. Clark, B. Com., Secondary Industries and Distribution, Mr J. Curtain, B. Com., Population and Employment, Mr N. L. Dunstan, Primary Industries and Construction, Mr R. A. Hamilton, B.Com., Finance, Mr D. J. Hourigan, B. Com., A.A.S.A., Automatic Data Processing, and Mr W. N. B. Pratt, B. Com., Dip. Pub. Admin., A.A.S.A., *p.s.a.*, Publications and Research.

Second, my thanks are due to the many persons and institutions listed below who either supplied basic information for the various articles or advised on their preparation. Their suggestions in many cases made possible a continual revision of the scope as well as the contents of various articles.

Third, I must thank Mr Norman Quaintance for his typographical services and the Government Printer and his staff for their interest, skill, and resourcefulness in printing this book.

The following persons and institutions assisted in the preparation of the articles :

PART 1 PHYSICAL ENVIRONMENT

Commonwealth Bureau of Meteorology
Department of Crown Lands and Survey
Fisheries and Wildlife Department
Forests Commission, Victoria
State Rivers and Water Supply Commission
Town and Country Planning Board
University of Melbourne—Dr E. C. F. Bird
Department of Geology

PART 2 GOVERNMENT AND ADMINISTRATION

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Clerk of Parliaments
Commonwealth Electoral Officer for Victoria
Crown Law Department
Official Secretary to His Excellency the Governor of Victoria
Premier's Department
Public Service Board of Victoria
State Library of Victoria—Archives Division

PART 3 DEMOGRAPHY

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Immigration Department (State)
Ministry of Aboriginal Affairs

PART 4 INDUSTRIAL CONDITIONS, EMPLOYMENT, AND PRICES

Department of Labour and Industry
Department of Labour and National Service
University of Melbourne—Faculty of Economics

PART 5 LOCAL GOVERNMENT

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Country Fire Authority
Country Roads Board
Geelong Waterworks and Sewerage Trust
Latrobe Valley Water and Sewerage Board
Local Government Department
Melbourne and Metropolitan Board of Works
Melbourne City Council
Port Phillip Authority
State Rivers and Water Supply Commission
Town and Country Planning Board
Western Port Regional Planning Authority

PART 6 PRIMARY PRODUCTION

Australian Barley Board
Australian Wheat Board
Australian Wool Board
Bureau of Agricultural Economics
Department of Agriculture
Department of Crown Lands and Survey
Fisheries and Wildlife Department
Forests Commission, Victoria

Grain Elevators Board
Land Conservation Council
Milk Board
Mines Department
Ministry of Fuel and Power
Rural Finance and Settlement Commission
Soil Conservation Authority
State Rivers and Water Supply Commission
University of Melbourne—School of Agriculture

PART 7 MANUFACTURING INDUSTRY

Department of Trade and Industry
Gas and Fuel Corporation
Metal Industries Association of Victoria
Ministry of Fuel and Power
Premier's Department
State Electricity Commission

PART 8 SOCIAL CONDITIONS

The Age

Anti-Cancer Council
Australian Broadcasting Commission
Australian Broadcasting Control Board
The Australian Financial Review
Australian Red Cross Society (Victoria)
Ballarat Historical Park
Cancer Institute
Catholic Education Office
Children's Court
Commonwealth Department of Education and Science
Commonwealth Department of Health
Commonwealth Scientific and Industrial Research
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Liquor Control Commission
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Mental Health Research Institute
Ministry of Social Welfare
Monash University
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Overseas Telecommunications Commission
Port Phillip Sea Pilots Service
Portland Harbor Trust Commissioners
Postmaster-General's Department (Victoria)
Road Safety and Traffic Authority
Transport Regulation Board
Victorian Railways Commissioners
Western Port Regional Planning Authority

APPENDIX A

A.P.M. Forests Pty Ltd
The late Mrs F. Baxter
City of Sale
Commonwealth Bureau of Meteorology
Department of Agriculture
Education Department
Esso Standard Oil (Australia) Ltd
Gippsland Base Hospital
Mr M. H. McMahon
Mines Department—Geological Survey
R.A.A.F. Base, East Sale
Shire of Avon
State Electricity Commission
State Rivers and Water Supply Commission

APPENDIX G

La Trobe Library

V.H.A.

1

PHYSICAL ENVIRONMENT

FORESTS OF VICTORIA

Introduction

The forests of Victoria are plant and animal communities of great diversity, ranging from the tallest of hardwood forests in the cool wet mountains to stunted mallee heathlands in the arid north-west.

The complex structures of the forest communities give them a resilience which enables them to withstand drought and fire, and makes them amenable to many forms of use. They are sustainable systems from which wood and other products can be harvested continually without detriment to their stability or productivity, and they provide shelter and food for a great variety of birds and animals.

One third of the total land area of Victoria is forested, and over 5 million acres, comprising approximately one tenth of the land area, is suitable for commercial timber production. More than 7 million acres of Victorian forest lands are permanently reserved, mainly as reserved forests, but also as national parks and for other purposes, thus conserving as natural habitat for native fauna more than 12 per cent of the total area of the State.

The plants of a forest usually form recognisable layers. Below the canopy formed by the crowns of the dominant trees, the shrubs and lesser trees grow at one or two distinct levels, and there is usually a layer of grasses, ferns, herbs, or mosses on the ground surface. Such strata are most numerous and conspicuously developed in tall mountain forests. Understorey and shrub strata are less luxuriant in the stringybark forests found at lower elevations and they are quite sparse in some open forests and woodlands. Eucalypts and wattles are the principal trees in all the major native forests. Radiata pine, the most widespread introduced tree, is used in commercial softwood forests which now comprise approximately 1 per cent of the total forest area.

The compositions of most areas of forest appear as mosaics of slightly differing associations of plants, or as gradually changing compositions, reflecting differences in soil, aspect, drainage, elevation, and fire history.

These forests grow in one of the most fire-susceptible regions of the world. Drought is a characteristic of the environment; most of the plant associations are inflammable; and lightning and man's activities cause many ignitions. Fires spread rapidly in hot dry windy weather, and they are

most intense where heavy accumulations of forest debris occur on steep slopes.

Mountain forests

The forests of the cool, high rainfall areas of the mountain country are of three main types. On the rocky outcrops and upper slopes of the highest ranges and on the high plains the forests are short, sub-alpine woodlands interspersed with grassland, herbfield, and marshes. At elevations below 4,500 ft on less exposed sites adjoining the woodland, the forests are tall pure stands, mainly of alpine ash. They extend down to elevations of 3,700 ft and as low as 2,400 ft on southerly aspects. The very tall dense forests of mountain ash are at lower elevations on deep fertile soils and in sheltered sites in the mountains.

Alpine ash and mountain ash forests are Victoria's most valuable source of native timber, and they clothe the upper reaches of the principal catchments of most major streams. With their variety of wildlife, profusion of botanical attractions, and magnificent scenery, the ash forests rank highly as areas for public recreation and scientific study.

Ash timbers surpass all other hardwoods of south-eastern Australia for use as flooring, joinery and furniture stock, interior trim, and other mouldings. Selected logs are sliced into decorative veneers or may be peeled in a lathe to produce veneer for structural plywoods. Young wood from forest thinnings and residues from logging and sawmilling are used as raw material for paper making.

Sub-alpine woodlands and grasslands

The climate in the sub-alpine zone between 4,500 and 6,000 ft is characterised by frequent snowfalls in winter and severe frosts during the growing season; the snow lies for about twelve weeks of the year. Bogong and Dargo High Plains and adjoining mountain tops, Mt Hotham and Mt Howitt, are typical areas. The general locations are shown on the map which accompanies this article (facing page 16).

Snow gum is the principal tree species of the woodland. It grows with deep crowns and short trunks. The ground cover is mainly austral snow grass. Near its upper limit the woodland has the form of a stunted scrub or wet mallee, interspersed with shrubby heath or grassland.

Golden shaggy-pea, leafy bossiaea and other legumes, heaths, mint-bushes, and kunzeas are the main shrubs. Shaggy-peas and bossiaea form low thickets where fires have been intense. Deep bogs of sphagnum moss occupy permanently wet sites, which are important sources of water flow in the high catchments during summer. Many bogs have been destroyed or badly damaged by fires and trampling cattle. The extensive grasslands are composed mainly of austral snow grass. Black sallee and Dargo gum occur in a few places in the woodland.

Snow gums on large areas of the north-eastern mountains have been severely damaged by wild fires. The bleached trunks of the trees still stand, and clumps of coppice shoots have grown from their bases. Young trees have also regenerated from seed.

Alpine ash forests

Alpine ash forests are widely distributed in numerous separate areas in the eastern highlands. There is a very small area also on Mt Macedon. Major

forests of alpine ash are located at Nunniong, Mt Stirling, Mt Wills, Mt Ewen, Moroka River, Mt Skene, Mt Misery, Mt Whitelaw, and the Tea-tree Range. The climate in these areas is characterised by cold winters and heavy precipitation of 40 to 90 inches a year including snow. Generally, snow lies on the ground for eighteen weeks of the year, and there are up to about 200 severe frosts in a year. Summer temperatures seldom exceed 85° F.

Small areas of forest of alpine ash in mixture with candlebark and snow gum are found in the fringe of the pure stands along their upper limits. In a few places there are associated areas of mountain gum forests, with narrow-leaved or broad-leaved peppermints in mixture. Small areas of mountain ash and shining gum forests also occur with the alpine ash.

The best development of alpine ash forest is on soils derived from granitic and basaltic rocks and metamorphosed formations. Mature trees in such locations reach heights of 250 ft with trunks up to 140 ft long, and some have diameters of 10 ft. More usually, mature trees are 175 to 200 ft tall and their trunks are less than 6 ft in diameter. On poor soils and exposed sites at higher altitudes the trees have short trunks and large branches.

Understoreys in alpine ash forests vary with elevation, aspect, and fire history. At lower elevations the understorey is a tall stratum of blanket-leaf, hazel pomaderris, musk, and shining cassinia. Ferns, mosses, and other elements similar to those of the more luxuriant mountain ash forests form a lower stratum. In some places the understorey is a sward of austral snow grass with a few scattered shrubs. A shrubby understorey in which silver wattle, early hickory wattle, hop bitter-pea, and elderberry panax are most common is typical at high elevations. In the east Gippsland highlands there are some dense shrubby understoreys consisting mainly of waratah, prickly coprosma, and mountain pepper.

Growth

Vigorous dense forests of alpine ash grow about 280 cu ft of wood per acre in a year. The tallest trees on favourable sites may be 130 ft high at 30 years of age, and 180 ft at 70 years. All trees in a typical area of alpine ash forest are usually of the one age. They have their origin as seedlings germinating from the very small seeds of the previous crop scattered on the ground after a fire.

The mature trees produce a crop of seed each year. The process of budding, flowering, and development of the seed extends over three or four years. It begins in the axils of the leaves with the formation of buds which take two years to develop into clusters of flower buds ready to open. The seed is mature one year after flowering, but it is not usually shed until two years after, unless the trees are affected by a forest fire. The heaviest crops of seed are produced by trees which have large crowns in dominant positions in the canopy. The capacity of a forest to produce seed increases sevenfold as it grows from 50 years of age to 100 years. Stands on northern and western aspects produce almost twice as much seed as similar stands on southern and eastern aspects, and as many as six million seeds per acre may be produced in a single flowering season.

Insects use alpine ash seeds as food. A species of lygaeid bug and various small black ants are known to take large quantities of the seeds that fall to the ground.

Success of the seed crop in producing seedlings depends very largely on the condition of the ground surface. The seeds need conditions favourable to rapid development after germination because they contain only very small stores of food for the germinating seedlings, and the seedlings must develop strong root systems in the short time available before the surface soil dries in summer. A bare seed bed of loose soil exposed during logging, or by subsequent cultivation, or by burning the debris after logging is ideal. Weather conditions which favour rapid early growth are required for the seedlings to become established in sufficient numbers to restock the forest.

Seedlings grow most rapidly on a bed of ashes left by a hot fire, where the supply of nutrients is good and there are no weeds to shade the seedlings or compete with them for nutrients and water. Hot fires in logging debris in late summer and autumn produce very good seed beds. Fires in the spring allow a period of growth for shrubs, herbs, and grasses during the summer before the alpine ash seeds are able to germinate. Most of these will germinate only after they have been in cold moist conditions for some weeks, as in the mountains during the late autumn, winter, and spring. The main period of germination is October and November, shortly after the snow thaws.

Spring frosts may kill some alpine ash seedlings. Frost lifts the surface layers of moist loose soils on shaded slopes and in the shade of stumps, shrubs, and mounds of soil, and damages the seedlings by stripping the roots. In late spring there is a rapid change in conditions in the seedbed. The sun heats the ground and soil temperatures may rise as high as 160° F., killing the tissues in the seedling stems.

As seedlings enter their first winter they are subject to damage by snow and are affected by water from melting snow. This water may saturate the internal tissues of the leaves and kill them. Mortality due to this cause is least among seedlings growing on ash beds because they develop a thicker waterproof layer of waxy material on the leaf surfaces. The more robust seedlings on ash beds are also less prone to be pushed down to the saturated soil surface by the snow. Crops of young saplings of alpine ash are commonly very dense. At 5 years they may have 5,000 trees per acre. The numbers decline naturally at a steady rate, and 400 per acre is typical at 30 years.

Wild fire in alpine ash forests causes very serious damage. Although there is thick fibrous bark on the lower trunk of the alpine ash, the upper trunk and branches are poorly protected by thin bark and the trees are killed by severe fires.

Large populations of leaf-eating insects occasionally develop in alpine ash. Plagues of phasmatids defoliate large areas. The insects are widespread in the central highlands and north-eastern Victoria. The mountain ash forests also are attacked by phasmatids. Defoliations by phasmatids have caused many trees to die of starvation. Reserves of starch in the sapwood of the trees are depleted during the period of rapid growth in spring and summer, and if the trees are defoliated in two successive summers the crowns cannot produce enough starch to sustain them during the following

spring. Saw-flies occasionally cause severe damage to the crowns of alpine ash and other eucalypts.

Mountain ash forests

There are larger, more continuous areas of mountain ash forests than of alpine ash, and they are more variable, with more complex structures.

Mountain ash forests in the central and eastern highlands and the southern uplands are on deep well-drained loamy soils derived from granites and sedimentary rocks. Well known locations of mountain ash forest are in the Yarra River valley, the Acheron River valley and at Noojee, Tanjil Bren, Erica, Kallista, and Beech Forest. They require a cool moist mountain climate, and grow best between 1,000 and 3,000 ft in areas where the annual rainfall exceeds 45 inches. At the lower elevations they are confined to damp southerly aspects.

The mountain forests of eastern Gippsland are located on the plateau and adjoining ranges of Mt Ellery. They consist mainly of shining gum with small areas of mountain ash and alpine ash. On the Goonmirk Range there is a mossy rain forest thicket comprising mountain pepper, waratah, and Christmas bush, above which mountain plum-pine rises to a height of 35 ft. This localised community appears to require a fire-free environment and to be in cloud for much of the year.

Composition

Typical mature mountain ash forest is a dense stand of trees of uniform age, over 200 ft high. All the dominant trees are mountain ash, and there are three distinct strata beneath them.

Under the high canopy of mountain ash trees there is an intermediate stratum of shade-tolerant trees about 100 ft tall. Blackwood and myrtle beech predominate in the cool moist gullies, and in a few places there are stands of southern sassafras. Silver wattles are numerous on the gentle lower slopes, especially where there are openings in the mountain ash canopy.

A dense mixed stratum of small trees and shrubs, mainly hazel pomaderris, prickly coprosma, musk, blanket-leaf, austral mulberry, sweet pittosporum, common cassinia, Christmas bush, and soft and rough tree-ferns occupies the lower levels up to 50 ft. The ground layer comprises wiregrass, smooth nettle, bracken, and other plants that tolerate the shady damp conditions at the forest floor. Tecoma and clematis climb from the ground into the crowns of the trees of the intermediate stratum. As the mountain ash canopy intercepts about 30 per cent of the sunlight, and the other trees and shrubs intercept a further 65 per cent or thereabouts, usually no more than 5 per cent of full daylight can reach the ground plants or litter.

In the Otway Range there is no southern sassafras but satinwood is common. Extensive stands of blackwood have replaced mountain ash forest in the eastern and western sectors of the range following a succession of wild fires which moved in from settled lands in the north and north-west. Shining cassinia and bracken thickets, and bracken fields, occupy many ridges and slopes that have been burnt repeatedly by wild fires.

The range of conditions under which mountain ash grows is varied enough to have allowed noticeable variations to develop within the species.

Seedlings from parents at the colder higher elevations have superior resistance to frost, and they grow more slowly than seedlings from trees from lower parts of the natural range. These and other small but significant natural variations in stock from different localities enable selected nursery stock to be raised to suit particular environments.

Wild fires may cause severe damage to the mountain ash forests. Mountain ash has a thin bark, and the trees are not usually capable of recuperating after wild fires; but the seed capsules can survive the most severe fires to open and spread seed on the ground a few days later. Very severe fires in 1939 killed large areas of mountain ash forest, and most of the existing regrowth forests originated shortly after those fires. Very mild fires appear to have led to the development of a second storey of mountain ash trees within existing forests in some situations. The fires probably moved into the mountain ash forest at night, killing only understorey trees and shrubs and the weaker trees in the dominant stratum. Seedlings of mountain ash developed in this environment in time to form a second stratum.

Silver wattle and early hickory wattle germinate prolifically after fire from hard seeds which survive in the ground for many years, and they form dense stands with understoreys of bracken and shrubs. On the most exposed sites the understorey vegetation after fire is almost entirely bracken and common cassinia.

There are large areas of wattle scrub within the mountain ash forests in the central districts of Victoria. Silver wattle forms pure stands in gullies and on other sheltered sites, and hickory wattle predominates on ridges and exposed westerly aspects. The understorey plants of the mountain ash forest develop strongly under the wattle at first. When the wattle stand is 35 to 40 years old the trees reach heights of about 90 ft, and diameters of 16 inches are common. The scrub understorey plants are almost entirely suppressed.

Rain forest communities of plants are associated with the mountain ash forests in Victoria, especially in the Otway Range. They are water-loving, shade-tolerant vegetations, often dominated by myrtle beech. They occupy continuously moist and sheltered locations which are not subject to extremes of temperature. In the densest rain forest only 0.5 to 2 per cent of sunshine reaches the ground. Epiphytes and ground ferns are abundant. Eucalypts are only incidental in rain forest, and any eucalypt component in the vegetation fades away as the rain forest develops to its ultimate composition. Although the eucalypts which may occur in rain forest are the tallest trees they have a negligible effect on the habitat compared with the dense understorey of rain forest plants. Eucalypt forest does not encroach into patches of rain forest unless it is disrupted by fellings or fire.

Fauna

The dense layers of vegetation of mountain ash forests provide a variety of habitats for animals and birds. Crowns of tall trees provide food and shelter for the greater glider, sugar gliders, and fluffy gliders.

Hollows and branches of the smaller trees are nesting places for the ringtail possum and the brushtail. These possums feed on the crowns of the trees. Mountain possums feed on the ground and nest in hollow logs. Mountain ash regrowth forests, silver wattle, and shining gum stands are the habitat of Leadbeater's possum.

Swainson's phascogale shelters near the ground and seeks its prey among litter and low vegetation. Potoroos eat herbage, roots, tubers, and other vegetable food, and build nests in the low vegetation. Long-eared bats shelter in hollows in tree trunks and feed on flying insects. Hollow logs in rain forest within the mountain ash forests provide shelter for the tiger cat. Wombats burrow into the soft earth and sometimes shelter in hollows in logs and the butts of large trees. Black-tailed wallabies feed and shelter in thickets throughout the forest. Southern bush rats favour bracken scrubs in and adjacent to eucalypt and wattle stands where their preferred food is thin-stemmed grasses.

There is a similar range of bird habitats and foods, from the harvest of flying insects by swifts and swallows above the canopy, to the lyrebird's food and nesting sites amongst the dense undergrowth. The lyrebird is common throughout large areas of the ash forests and other forest types in the highlands. It is a special attraction to visitors in the Sherbrooke Forest.

The spotted pardalote and white-naped honeyeater feed in the mountain ash crowns. Shrike-tits seek their food under loose bark on the limbs, and white-throated tree-creepers on the tree trunks. Satin flycatchers and grey fantails catch insects in the air below the crowns of the trees. Brown thornbills find food in the crowns of the undergrowth, and the scrub-wren in the low ground cover.

Growth

Young mountain ash forests grow very rapidly. Saplings are 20 ft high within four years, and 50 ft by the time they are 10 years old. They are commonly 100 ft high at 20 years and even 150 ft on the very best sites. Thereafter height growth tapers off; at 60 years the tallest trees reach about 180 ft. An acre of forest of average quality has the capacity to produce 400 cu ft of wood a year; but in untended stands the poorer trees decline and die so that at 60 years the volume of living trees is about 19,000 cu ft per acre.

Foresters thin young mountain forests to harvest the wood which would be lost through mortality and to ensure that the productive capacity of the site is used by vigorous well-formed trees. Trees respond to thinning by development of their root networks and rapid expansion of their crowns. A thinning at 30 years to harvest the timber in the suppressed trees yields about 4,000 cu ft per acre; a second thinning at 50 years yields about 6,000 cu ft; and the stand will then grow vigorously, carrying about 13,000 cu ft per acre at 60 years of age.

Natural regeneration of mountain ash is not so densely stocked as alpine ash. Although there may be as many as 30,000 seedlings to the acre at the end of the first season, their numbers diminish rapidly during

the next few years. After 5 years the stocking is about 3,000 ; at 30 years of age it is 200 ; and by the time the stand is 180 years old competition and suppression reduce the number to about 30 trees to the acre.

Young mountain ash trees shed their lower branches, as do most eucalypts growing in forest stands, producing clear smooth boles. Small limbs at the base of the crown die early, and a brittle zone forms near the base of the dead branch which soon breaks off leaving a stub. A second fracture develops across the base of the brittle zone and the stub is ejected from its socket as the diameter of the trunk increases. The wound grows over. In less dense stands, branches are thicker and many stubs persist in the trunks of the trees. Pockets of decayed wood form at the bases of the stubs, later extending into the wood of the trunk.

In the process of such rapid growth, with the suppressed trees dying and branches, leaves, and bark being shed, the forest produces a large quantity of litter. The dry weight of the annual litterfall in young stands exceeds 6,000 lb per acre, and it increases to about 7,300 lb at 45 years and thereafter. Less litter accumulates than in some stringybark forests because of its faster decomposition on the damp forest floor.

Natural regeneration of the mountain ash forest is achieved by the germination of seeds of mountain ash and acacias and some other understorey species, and by the regrowth of others from tubers, rhizomes, and bulbs. The seed crop of mountain ash, the dominant tree species, reaches only about 100,000 seeds per acre per year and is very variable. Seeds do not accumulate in the forest litter, and more than three quarters of the seeds which are shed by the trees are gathered from the ground by black ants and other insects. Successful regeneration of mountain ash must await a severe fire, or timber harvesting accompanied by preparation of a seed bed that will be suitable for the germination of seed from natural seedfall or from broadcast or aerial sowings. Exposed mineral soil is a favourable seed bed. The most favourable seed bed is produced by the effects of high temperatures and ashes deposited on the soil during the burning of accumulations of logging debris.

Flower buds of mountain ash develop for nearly two years before flowering, and the seed takes one year to mature after pollination. A seed capsule contains only two or three viable seeds. Capsules usually open during the late summer and autumn, shedding the seeds within a distance roughly equivalent to half the height of the parent tree, although some capsules fall from the tree without opening to release the seeds. Mountain ash seeds germinate late in the first autumn after they fall.

Seedlings of mountain ash cannot survive under the shade of other trees. Many die because there is insufficient light to support the level of photosynthesis required in their leaf tissues to sustain them. They are attacked by fungi which flourish in the dark humid conditions.

Reforestation of wattle and scrub areas with eucalypts requires spraying with hormone herbicides to kill the weed crop, followed about 9 months later by smashing down the dead trees and shrubs with an angledozer and then burning the debris to prepare receptive, weed-free seed beds for sowing with mountain ash, alpine ash, and other valuable eucalypt species.

Some areas of mountain ash forest have been established by planting.

The trees have developed very well in regularly spaced rows. One small area in south Gippsland has already been thinned, producing a large yield of pulpwood.

Stringybark forests

The stringybark forests do not match the grandeur of the mountain forests, but they produce a large proportion of the timber used in Victoria and have done so for many years. They are rich in shrubs and wild-flowers, and they provide a very large area of varied habitats for native animals and birds. Many of them protect the water catchments that supply domestic water to Victorian towns. The general term, stringybark forests, is used here to denote the numerous forest types in which various stringybark eucalypts and associated species occur. They include mixtures of stringybarks, peppermints, and gums, and also pure stands and mixtures of silvertop ash.

These forests are the most extensive of Victorian forest types. They comprise practically all the timbered country on the coastal plains and in the foothills north and south of the Dividing Range up to elevations of 3,000 ft. They also occupy parts of the Grampians and hilly western extensions of the Dividing Range, such as the Southern Pyrenees and Mt Cole.

Most of the stringybark forests are within the 25 to 40 inch rainfall zone, but the conditions of climate and soils where they flourish vary greatly. The inland soils are mainly loams derived from sedimentary rocks, and on the coastal plains they are mainly sands and gravels. There are extensive areas of these forests on shallow soils and steep slopes of the ranges and foothills.

The eucalypts which comprise these forests are described by names which refer to the distinct forms of bark on the trunks and large limbs of the trees.

A stringy bark consists of long-fibred strands. It may be pulled from the tree trunks in long strips. The peppermint bark consists of shorter strands with a fine interlaced appearance. Gum barks are smooth almost to the bases of the trees, and they are shed in ribbons or flakes. Silvertop ash is named for the white smooth bark of the upper branches, which contrasts sharply with the rough dark deeply-furrowed bark of the trunk.

The composition of the stringybark forests varies greatly from place to place. Sometimes localised patterns of different compositions follow the ridge and gully system of the terrain, drainage differences between sites, and the distribution of neighbouring soil types. Pure or almost pure stands of one overwood species can occur in patches or tongues which reflect such site differences. Changes in the composition of the overwood and understorey up long mountain slopes are sometimes related closely to elevation.

Messmate stringybark occurs on nearly all classes of country in the mixed forests, but is scarce in the mountains east of the King River in north-eastern Victoria. Mature trees of messmate have long trunks and rounded branching crowns. They attain diameters of 5 to 7 ft and heights of 160 to 200 ft on deep soils in the wet mountains. The many different associations of trees and shrubs which occur within this wide and extensive range of

habitats are described by reference to the main geographical zones of the Midlands, the Otway Range, the Grampians, eastern Gippsland, the southern foothills, the north-eastern foothills and ranges, and several other small localities.

Growth

Well-stocked young stands of stringybarks, gums, or silvertop ash grow vigorously. Typical old-growth stringybark forest is not well stocked with vigorous trees, however, and the old trees grow slowly. There is a greater variety of sizes and ages of trees in these forests than in the alpine ash and mountain ash, and mixtures of trees of all ages from veterans over 200 years of age to new seedlings may be observed in places.

When fire, grazing animals, insects, or drought defoliate, kill, or badly damage eucalypt seedlings of these forests, new shoots grow from specialised woody structures known as lignotubers, which contain many dormant buds and a store of carbohydrates. They develop early in the life of seedlings of all eucalypt species in the mixed forests, and they enable these eucalypts to survive in harsh environments. The buds in the buried lower folds of a lignotuber survive the most intense fires. A crop of seedlings, each with the capacity to regenerate in this way after severe damage, constitutes a reserve from which the forest can recover if the overwood is killed or removed. Mountain ash and alpine ash do not have this means of survival.

As a rule numerous seedlings of stringybarks and associated species of the forests on moist fertile sites will occupy any gaps made by fellings. In the mountains and wet foothills, gaps and clearings in the forest are also quickly occupied by dense growths of acacias and other small trees and shrubs which compete strongly with the eucalypts. Eucalypts of the stringybark forests regenerate readily also by the growth of coppice shoots from the stumps of felled trees.

Messmate and silvertop ash saplings on favourable sites grow rapidly until they reach heights of about 50 ft. The rate of height growth then declines and the crowns of the trees become rounded and flatter on top. Other stringybarks and associated species grow less rapidly. On very poor dry sites the growth rate declines after the trees are 10 ft high.

Fire

Some of the stringybark forests in Victoria are among the most inflammable timberlands in the world. They shed great quantities of bark, large branches, branchlets, and leaves, which accumulate on the forest floor. Fine materials in this litter dry out rapidly after rain and during periods of low relative humidity. Fire will spread quickly in such heavy accumulations of fine fuel and high flames scorch the crowns of mature trees. Flames run up the trunks of stringybark trees into their crowns, and burning pieces of bark blow off and ignite spot fires ahead of the fire on the ground. Tubular ribbons of candlebark, especially those hanging from the trees, are borne aloft in the updraft of forest fires. They have been observed at 11,000 ft above an intense fire, and have been known to cause spot fires 18 miles from the original fire. The intensity of forest fires is influenced strongly by the quantity of fuel on the ground. Stringybark forests commonly accumulate as much as 20 tons of litter per acre

and a vigorous dense stringybark forest of mature trees may have 100 tons per acre.

Cool controlled fires can be used to reduce the quantity of fuel, especially the fine materials which create the most serious hazard, without damaging the dominant trees of the forests. Fire for this purpose is controlled by igniting at a time and to a pattern determined by measurements of the quantities of fuel and observations of weather conditions. After a controlled fire the process of accumulation begins again at a rate of about one ton per acre per year. The intensity and rate of spread of fires increases fourfold as the amount of fine fuel increases from three tons to nine tons per acre. A stringybark forest made safe against fire by a controlled fire can accumulate sufficient fuel in the next four to six years to make fire fighting very difficult and dangerous, and the intensity of wild fires severe and damaging.

Any more than three tons of fuel per acre may burn on a summer day of moderate fire danger with an intensity of 100 British Thermal Units (B.T.U.) of heat per second per foot of fire edge. A fire of this intensity can kill foliage up to 60 ft above the flames. When the intensity exceeds 200 B.T.U. all the foliage on the tallest trees is killed, but the trees are seldom killed and they recuperate strongly from dormant buds in the branches and trunk. The feathery epicormic shoots which develop from these buds are characteristic of these forests after wild fires. Fire induces the formation of veins and pockets of gum in the new wood, and where the growing tissues of the wood have been killed, insects and decay fungi invade the tissues of the tree, leading to loss of vigour and to inferior timber quality.

Fauna

Stringybark forests are natural habitats of diverse populations of native birds and animals. The forests provide food, shelter, concealment from predators, and sites and materials for nesting. Leaves, flowers, fruits, seeds, and nectar of plants are food for many species and the insects, reptiles, and other animals which feed on them are themselves sources of food for other species. Worms, crustaceans, insects, and other animals in the soil are also important food sources. Undergrowths of silver wattle, blackwood, shining cassinia, leguminous shrubs, and bracken in gullies in the inland forests provide food and shelter for brown thornbills, blue and scrub-wrens, silver eyes, grey fantails, scarlet and yellow robins, grey thrushes, and red-browed finches.

The crowns of the stringybarks, gums, and peppermints produce foliage, flowers, fruits, and insect populations which are the food of crimson rosellas, striated thornbills, white-naped and yellow-faced honeyeaters, and golden whistlers. Moist gullies of the stringybark forests are the summer habitat of the satin flycatcher and the rufous fantail, while grassy ridges under broad-leaved and narrow-leaved peppermints are frequented by spotted quail-thrushes. Seeds of acacias are used as food by the bronze-winged pigeon and insects in the bark of trees are the food of orange-winged sittellas and white-throated tree-creepers.

The food plants of birds and animals regenerate abundantly from seed after fires, but if one fire follows another at an interval of less than 4 years some of the species of plants fail to regenerate and shrubs are

replaced by herbs and tussock grasses. When this happens quail-thrushes and buff-tailed thornbills, which prefer grassy understoreys, may replace brown thornbills and scrub-wrens, which prefer scrubby understoreys. Shrubs may also die out under a forest canopy if a long period of years passes without any fire.

Some bird species range widely over the stringybark forests. White-winged choughs, grey currawongs, and black-faced cuckoo-shrikes inhabit many areas, and the pallid cuckoo and fantail cuckoo are seen in numerous localities in the summer. Dusky wood-swallows also inhabit these forests in the summer and the flame robin finds a warm winter habitat in them. Three nocturnal birds, the boobook owl, barn owl, and tawny frogmouth, may be found in them at any time of the year. Flowers of trees and shrubs are the food source of many birds characteristic of the stringybark forest. Nectar in eucalypt flowers attracts the swift parrot, crimson rosella, and the musk, purple-crowned, and little lorikeets. Banksia and melaleuca undergrowths in the coastal and western forests support large populations of eastern spinebills, white-eared honeyeaters, and yellow-winged honeyeaters. Seeds of banksias and casuarinas are eaten by yellow-tailed black cockatoos.

The wetter messmate stringybark forests in the hills below mountain ash forest provide habitats for pied currawongs, gang-gang cockatoos, and mountain thrushes. The rufous bristle bird is confined to coastal habitats from Nelson to Torquay except for an inland extension into the Otway Range. Lyrebirds are common east of Port Phillip Bay and their populations are adapted to the fire environment of the mixed forests. Many lyrebirds survived an intense wild fire that burnt 300,000 acres of Gippsland forests in 1965 and within 2 years the birds were common throughout the burnt areas. Lyrebirds thrive where there is a mosaic of unburnt and recently burnt patches of forest, the latter providing an abundance of food for them.

The different foods and habitats of the various forms of the stringybark forests also support various species of mammals. Thickets of acacias and other leguminous shrubs are favoured by the black-tailed wallaby, and grey kangaroos are found in open grassy areas. The red-necked wallaby also lives in woodlands of banksia and heaths associated with the stringybark forests, as do the pygmy possum, feather-tailed glider, and the short-nosed bandicoot.

Midlands stringybark forests

The northern and southern slopes of the Great Dividing Range from Ararat in the west to the Kilmore Gap just north of Melbourne form a distinct zone in which the stringybark forests are characterised by pure stands of messmate stringybark on sheltered aspects on the most favourable soils. Forests of messmate in mixture with manna gum, candlebark, and narrow-leaved peppermint are the most extensive in the region; red stringybark, scent bark, and broad-leaved peppermint occur on the dry slopes. Blue gum and mountain grey gum occur along some of the streams flowing south from the Range.

Mining activity on the Ballarat and other goldfields in this region required very large quantities of mining timbers, mill logs, and fuel wood from these forests. Sawlogs and fuel were in demand again early in this century and the forests have been in use ever since, under more and more

intensive management until the present day. After many years of production these forests are still in fine condition, well stocked with vigorous trees, growing mill logs, poles, and pulpwood. Growth is small compared with mountain ash, seldom exceeding 50 cu ft of eucalypt wood per acre per year, but it has supported several important local industries for many years.

Selective fellings in these forests have had the advantage of removing the oldest trees, the less vigorous, and least valuable, thus giving growing space to the better trees. The seedlings under the main canopy have developed slowly, staying in the lignotuber stage for many years until released by the formation of substantial openings. Restricted areas of the forests have a very uniform appearance. Small short trees and the less valuable of the dominant trees have been removed, leaving evenly spaced stands of good trees of uniform size. Growth of these will continue until all are ready for harvesting, after which the whole stand will be regenerated.

Grampians forests

Forests of brown stringybark, messmate stringybark, and long-leaved box with a continuous heathy understorey up to 4 ft tall form the most extensive communities in the Grampians. They occupy the sandstone ridges and the outwash slopes. The forest is generally less than 60 ft high but the eucalypts reach 120 ft on a few favourable sites where the soil is deeper and moister. Messmate stringybark and scent bark grow on drier sites, with the Grampians thryptomene in rocky areas, and heath woodlands of brown stringybark and messmate stringybark in mixture with scent bark and some peppermint on the flatter wetter sites. A native conifer, the Oyster Bay pine, occurs on some of the exposed ridges.

The tallest forests of the Grampians are found above 2,000 ft on the sheltered slopes of major gullies, and on moist sites in deep red soils in deeply recessed ravines on the easterly and southerly aspects down to 1,500 ft elevation. They attain heights of 150 ft and the dominant trees are mountain grey gum, messmate stringybark, and some brown stringybark. The understorey plants are pomaderris, blackwood, common cassinia, common correa, Christmas bush, native hibiscus, soft tree-fern, and other ferns.

The western slopes of the sandstone ridges are occupied by stunted forests of long-leaved box and brown stringybark with dry scrubs of the endemic Grampians gum which develops best on sheltered scarp faces. Shiny tea-tree, Grampians fringe-myrtle, and heaths up to 3 ft tall occur where the soil is too shallow and dry to support trees. Wet scrubs of cross-leaf honey-myrtle up to 12 ft tall occur along the banks of sluggish drainage lines and headwater streams of the Wannon and Glenelg Rivers. Tall shrub woodlands of yellow box and yellow gum dominate associations with manna gum and river red gum in some of the valleys. Yellow box is generally found on shallower soils than is yellow gum.

Swamp gum in mixture with messmate stringybark and manna gum, over a heathy understorey in which prickly tea-tree and honey-myrtles are common, is found along watercourses low down the slopes and in several valleys. In the Victoria Valley there is shrub woodland dominated by river red gum with yellow box in which the most common shrubs are black wattle, blackwood, and silver banksia which grow as trees up to 25 ft tall

on the most fertile sites. A similar woodland occupies the Moora Valley. A distinct community of yellow box and black wattle forms a narrow transition zone between the stringybark forests and heath woodlands along the lower margins of outwash slopes.

Understoreys and heathland are rich in plants of the legume, myrtle, protead, lily, and orchid families. In no other part of Victoria is the common heath, the floral emblem of the State, so abundant and conspicuous.

Grey kangaroos and red-necked wallabies inhabit the Grampians and there are a few rock wallabies. Koalas are established in two colonies. Echidna, platypus, short-nosed bandicoot, and ringtail and silver grey possums are common, and more than 140 species of native birds have been recorded. Two introduced animals, the samba and red deer, are becoming more numerous in the Victoria and Wartook valleys. Foxes and rabbits are plentiful, while black, brown, and tiger snakes, and blue-tongue lizards are common.

East Gippsland forests

A distinctive feature of east Gippsland vegetation is the great range and variety of its plant communities. About half the State's complement of eucalypts and acacias grow there, and the forests are rich in ferns and mosses.

The composition of the dry lowland forests east of the Mitchell River varies with drainage, clay content of the soil, altitude, and aspect and terrain. In places as many as six species of eucalypt may be found in mixture within a few dozen acres of forest. Undergrowth consists of small leaved leguminous and proteaceous shrubs, chiefly acacias, bitter-pea, flat pea, banksia, hakea, and narrow-leaf geebung. Bracken is common in some places. Stands of silvertop ash and white stringybark occur on well drained ridges of granites, slates, and other sedimentary rocks. Red bloodwood and rough-barked apple occur in mixture with the silvertop ash and stringybarks in the extreme east.

White stringybark, southern mahogany, and yertchuk, with a lower storey of saw banksia, form another dry forest association on humus podsols over deep sands. Yellow stringybark and southern mahogany predominate on well drained clayey soils. Red ironbark occurs in some of the mountain grey gum and messmate stringybark associations, and on well drained ridges it predominates. Dry woodlands of white stringybark and southern mahogany, with banksia, shrubs, and bracken, occupy the poor soils on exposed sites near the coast.

Lowland woodlands on limestone near Buchan consist of manna gum and yellow box with an understorey of scattered shrubs and tussock grasses. Red stringybark, red box, and long-leaved box woodlands with a scattered undergrowth of shining cassinia and daphne heath and other shrubs occur on shallow soils on sandstone.

Where the annual rainfall exceeds 40 inches, and on very sheltered sites where the average rainfall is less, a wet form of lowland forest has developed, up to 200 ft tall on the best soil, comprising mountain grey gum, southern mahogany, and yellow stringybark with a dense understorey of hazel pomaderris and blanket-leaf, shrubs, and ferns. In the foothills there are wet forests of blue gum, brownbarrel, and river peppermint. Many of these wet eucalypt forests abut the rain forest into which they encroach following fires and in some places mature eucalypts overtop a mature lilly pilly stand.

Where sedimentary ridges run into black sands and alluvium along the coast there is a mosaic of mixed forests in which silvertop ash and white stringybark are the major trees. Messmate stringybark and mountain grey gum occupy some of the gullies, and on poorly drained sites yertchuk and mealy stringybark replace the silvertop ash and stringybarks. Stands on the ridges attain heights of 100 ft, but generally the forest is short, especially near the coast where the stunted trees seldom exceed 30 ft. Flat timbered ridges, gullies, and poorly drained sites are bordered by treeless swamps, many of which carry thickets of scented paperbark.

Understorey shrubs include sunshine wattle, golden and silver wattles, flax acacia, blanket-leaf, musk, prickly coprosma, gorse bitter-pea, hop goodenia, hop bush, and narrow-leaf geebung. Soft tree-fern, hard water-fern, coral fern, and bracken are common on wetter sites.

Coastal jungles in east Gippsland are patches of warm temperate rain forest with a dense canopy in which blackwood is often co-dominant with lilly pilly. Other trees which flourish in damp dark forest are kanooka, black oliveberry, yellow-wood, and sweet pittosporum. Up to five species of tree fern occur in some stands; many species of ropey lianes, ferny epiphytes, ferns, and mosses thrive in these shady sheltered communities. Cabbage fan palms up to 70 ft tall occur in rain forest near Marlo. Coastal rain forest reaches a height of more than 90 ft on rich alluvial loams and on friable soils on protected southern slopes.

At elevations above about 1,500 ft the lilly pilly forest is replaced by cool temperate rain forest of southern sassafras in which black oliveberry, mountain pepper, waratah, and blackwood are also abundant. Banyalla occurs in place of sweet pittosporum and, in contrast to rain forests in the southern uplands, there is no myrtle beech. Soft tree-fern is the main tall fern, and mosses are thick on tree trunks, fallen logs, and on rocks.

Otway Range forests

Growth is rapid and luxuriant in the wet forests of messmate stringybark, blue gum, manna gum, and mountain grey gum on the deep soils of the main ridge and elevated gullies and southern spurs of the Otway Range. The dense understorey is dominated by satinwood and acacias, hazel pomaderris, blanket-leaf, hop goodenia, bracken, and other ferns. High mats of wiregrass develop after fires and logging. Stands of blackwood and myrtle beech in which soft tree-fern, skirted tree-fern, and numbers of epiphytic and ground ferns thrive, occupy all the wetter gullies.

Drier foothills on the north of this coastal range support forests composed mainly of messmate stringybark, brown stringybark, narrow-leaved peppermint, and manna gum from 60 to 130 ft tall and an undergrowth dominated by leguminous and proteaceous shrubs. On the northern flanks the mixed species eucalypt forest runs into wet mallee heath, the tallest member of which is the small and often scrubby shining peppermint. The mixed forest and the mallee heath are bounded by treeless wet heath or grass-tree plains.

Foothills of the Dividing Range

On moist favourable sites in the southern foothills east of Melbourne messmate and manna gum form a tall forest below the mountain forests with mountain grey gum and narrow-leaved peppermint in the dominant

stratum, and tall silver wattle and shining cassinia in the understorey. At lower elevations in the foothills silvertop ash is prominent in the mixture of dominant species. Messmate forests with manna gum and candlebark extend eastward into the high elevations.

There are forests of yellow stringybark, white stringybark, candlebark, and red ironbark across the foothills of northern Gippsland where the rainfall is low due to ranges of mountains to the south and west; and red stringybark, red box, and yellow box with a very sparse understorey of austral snow grass occupy the lower hills.

Narrow-leaved peppermint is widespread in the northern foothills. It is a dominant tree with blue gum, candlebark, and silver wattle on deep gully soils and on southern and eastern aspects, and with long-leaved box and red stringybark on dry ridges. Tall messmate forest occupies the best sites. Broad-leaved peppermint, white brittle gum, and red stringybark form a dry forest with austral snow grass on the north and western aspects.

Red gum forests

Red gum forests are the most widely distributed of all types of forest in Victoria. There are extensive pure forests of river red gum along the Murray River downstream from Cobram and along the northern reaches of its tributaries. Savannah woodlands of the river red gum also occur on the western plains, and they are common along seasonal watercourses and in drainage depressions.

Open woodlands of another species of red gum, Blakely's red gum, in which there are scattered trees of white box and long-leaved box, grow on the low rises above pure stands of river red gum on river flats in north-east Victoria. They are also found on the gentle slopes of a belt of country stretching from the Wodonga district towards Port Phillip Bay. A third species, forest red gum, forms scattered woodlands in Gippsland between Warragul and Bairnsdale. It occurs also as a riverine species in the La Trobe River valley and the lower valley of the Tambo River.

Forest red gum occurs also in the gorge of the Snowy River at various elevations up to the former level of flooding. Here the trees have huge butts and numerous small trunks that have developed after the crowns of the trees have been smashed during floods.

The open woodland and gentle slopes of the red gum forests are well suited for outdoor recreation. Roads and tracks are inexpensive to construct, and there are many good sites for camps and picnics. Streams and billabongs enhance the forests for those purposes, and the numerous species of birds and animals associated with the water are strong attractions. They are generally less inflammable than most forest types, having sparse undergrowth and only small amounts of litter on the ground.

Red gum timber is used for sawmilling, sleepers, posts, and piles. It is in strong demand for its strength and durability, and the appearance of its fine grain and deep red colour. The forests have supported a viable timber industry since the earliest days of settlement. Barmah forest and other red gum forests provide excellent grazing for cattle, and wild horses, sheep, and kangaroos also graze in them.

River red gum forests

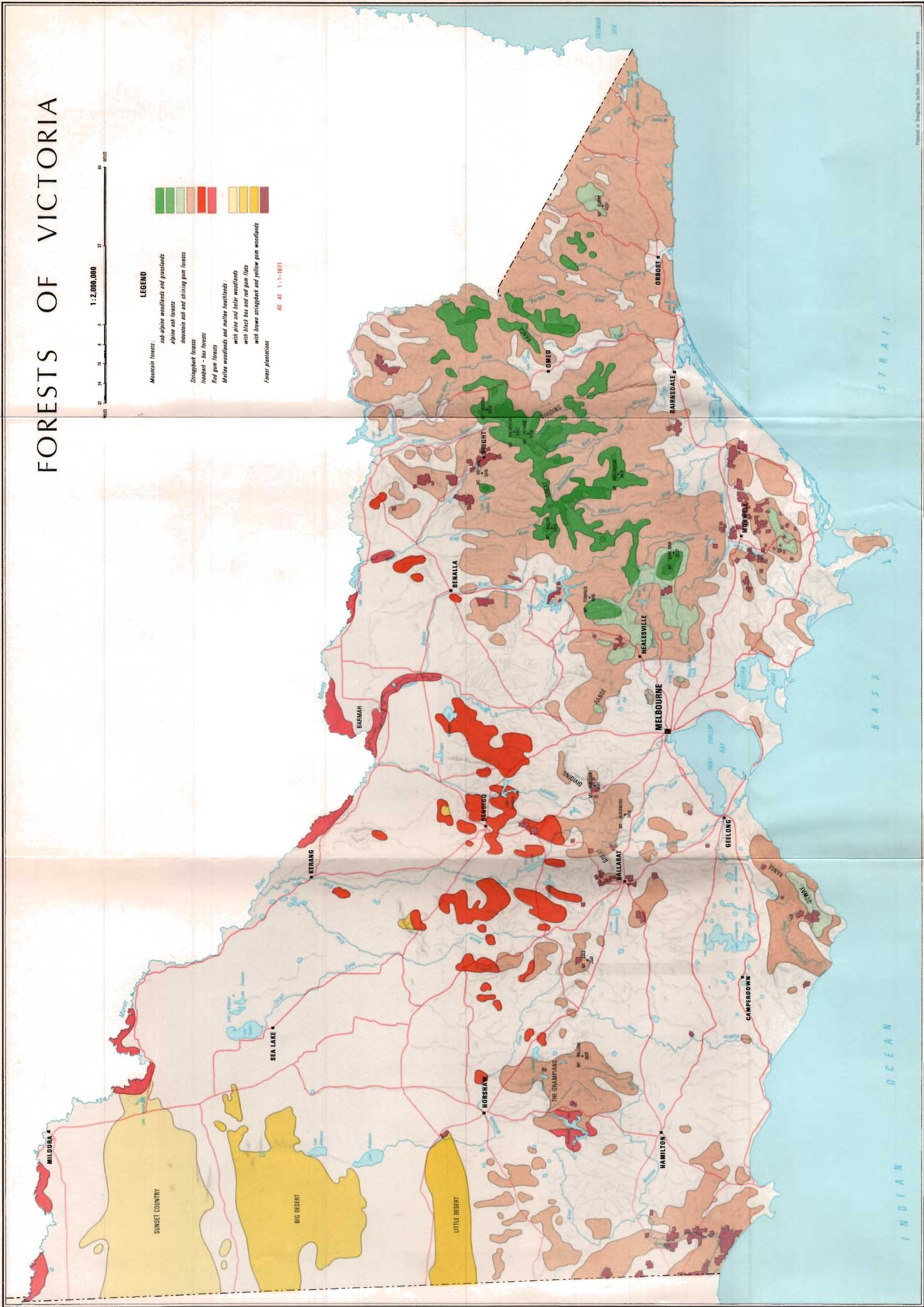
Pure stands of red gum in the riverine forests follow the pattern of regular inundation in the Murray River flood plain, with some extensions

FORESTS OF VICTORIA

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MILES 32 24 16 8 0 32 64

- LEGEND**
- Mountain forests:
sub-alpine woodlands and grasslands
alpine ash forests
mountain ash and shining gum forests
- Stringybark forests
Ironbark - box forests
Red gum forests
- Mallee woodlands and mallee heathlands:
with pine and beler woodlands
with black box and red gum flats
with brown stringybark and yellow gum woodlands
- Forest plantations

AS AT 1-1-1971



into sites where the subsoil receives water through sandy aquifers. The undergrowth is sparse over much of the river red gum forest. Moira grass is the main ground cover under the trees and on the treeless plains. Needle rush is the dominant species around the fringe of the flood plain and on those red gum sites that are seldom flooded.

Densely stocked areas of the forests on the best watered sites are up to 150 ft high, and the trees have long straight clear trunks. In the more open woodlands the trees develop short thick trunks and spreading crowns with several large limbs. Tongues of black box and yellow box forest occupy the sandy ridges and intrude into red gum stands on those sites where flooding is sporadic and brief. On the slightly higher ground red gum grows in pure stands or in association with black, grey, and yellow box trees.

Fauna

Red gum forests are most important areas of wildlife habitat. The Barmah forest has particular importance because of its geographical position in relation to other waterfowl areas in Australia, having become a major junction of the flyways of migratory waterfowl. Two hundred and eight species of birds have been recorded in this forest, of which fifty-six species are attracted to the area because of the water.

Water birds breed in large numbers in the Barmah forest because they find both trees and swamps there. The white-necked and white-faced herons, several species of cormorants, egrets, and spoonbills nest in colonies in the trees. Hollows in the forest trees are nesting places for the mountain duck, chestnut teal, and the maned goose. Several species of owls, parrots and rosellas, the kookaburra, sacred kingfisher, white cockatoo, galah, budgerigah, and the brown and white-throated treecreepers nest in hollows in trees.

Flooding at any season stimulates breeding of the white ibis and, at a later stage, the straw-necked ibis which is the main Australian species. The ibises depend on aquatic foods and suitable water conditions for breeding. They build their nests in cumbungi, lignum, and other low vegetation above flood level. Large breeding colonies depend on warm shallow flood waters for food. Other key ibis rookeries occur at the Kow Swamp near Gunbower, a natural marsh embanked to form an irrigation reservoir on a diversion of the Murray River, and the Kiewa Swamp.

Deeper water is used by diving ducks and cormorants, and a variety of environmental conditions provides suitable breeding places for swans, grebes, and other waterfowl. Waterfowl swamps and marshes hold great biological interest and are places of rare beauty; in fact, red gum forests provide for many popular recreations and are situated in districts that enjoy hospitable climates.

Among the mammals of the riverine forests, the grey kangaroo, brushtail and ringtail possums, the yellow-footed and brush-tailed phascogales, and sugar glider are common. The little mastiff bat is plentiful in some places and the echidna is widely distributed throughout these forests. Eastern water-rats are abundant.

The foliage of red gum is prone to attack by several insects, notably lerp insects and larvae of the gum leaf skeletoniser moth. The crowns of the trees recover quickly by means of epicormic buds, but recovery is slow after repeated heavy attacks. A period of new growth to re-establish

a vigorous leafy crown is required before a crop of flower buds can develop. The gregarious larvae of several species of saw-fly eat the leaves of eucalypts in the drier forests and woodlands. River red gum and yellow box trees are often completely defoliated.

Many insect colonies are destroyed by flooding, but seed-eating ants form colonies in trees above the high water level, and they are able to forage on the moist ground very soon after a flood recedes in the spring. The diminished frequency and extent of flooding in these forests has upset the former regime of natural control of insect populations which was effected by inundation of their habitats.

Flood waters in the river red gum forests enable crops of seedlings to develop. Ideal conditions for germination occur if the water recedes in spring, allowing the seed to germinate early on the damp soil and grow sufficiently to withstand the hot dry conditions of the summer. Huge quantities of seed fall to the ground as the capsules ripen after a heavy flowering. Mature stands produce more than 100 million seeds per acre in such a year. Much of the benefit is lost if the seed falls and germinates in cool wet weather before a flood, for the seedlings will be submerged and killed. However, the peak seed fall is usually in spring and summer, the spring peak coinciding with falls in the levels of the flood waters. Ants and other insects remove seeds from the soil, usually taking three quarters of the total seed fall and sometimes all of it, creating a major obstacle to natural regeneration.

Seedlings of river red gum develop a swelling near the base of the stem, from which new shoots may develop if the plant is injured, but they do not develop true lignotubers. They withstand long spells of dry weather by shedding most of their leaves and growing new shoots when water again becomes available.

Ironbark and box forests

Ironbark and box grow on poor soils in a region of low rainfall and hot dry summers. The main forests are mixtures of red ironbark and box eucalypts, and their local composition is largely a reflection of the fertility and water holding capacity of the soil. The soils are gravelly or sandy loams and clays, which are shallow and stony on the ridges and steeper slopes. The scars of gold mining, gravel stripping, and eroded areas are common.

The most abundant trees are grey box, red ironbark, and yellow gum, all of which produce very strong, durable dense hardwood. Red ironbark-grey box associations, usually 50 to 60 ft high, are found low down on well drained slopes. Pure patches of red ironbark occupy poor stony sites, and grey box predominates on the deeper sandy loams. Mixtures of grey box and yellow gum, up to 70 ft high, occur on broad alluvial flats and in gullies, the composition varying from pure grey box on the moister sites to almost pure yellow gum where the soil is very shallow.

Mixtures of red ironbark, red box, long-leaved box, and red stringybark occur on the poorest skeletal soils on the steeper slopes. Yellow box is most common along watercourses, and river red gum is restricted to the banks of the permanent streams and drainage lines with wetter subsoils. Occasional clumps of green mallee occur as an understorey in stands of red ironbark in the Rushworth district.

Generally, there is a sparse undergrowth of drought-resistant plants which may form three distinct layers under the eucalypt overwood. The low ground cover consists mainly of wattles, parrot-peas, bush-peas, bitter-peas, grevilleas, heaths, and several grasses. *Hakea*, *acacia*, sweet bursaria, cross-leaf honey myrtle, and shining cassinia are common in the tall shrub layer. The small tree layer consists of eucalypt coppice and seedlings, golden wattle, and occasionally, cherry ballart.

Dodder-laurel, an almost leafless parasitic twining plant, is widely spread in the central areas of the ironbark-box belt; coppice stems, seedlings, and saplings of all the eucalypts, and most of the shrubs and other small trees, are hosts. The host plant loses vigour through direct parasitism and shading of its leaves, and eventually may die. Dodder also spreads by seed; it is a prolific seed bearer, and the seeds are eaten and spread by wallabies and other grazing animals.

Long-leaf mistletoe and other evergreen mistletoes are widespread hemiparasites of eucalypts in the ironbark-box forests where they appear as clumps of pendulous foliage in the crown. The small mistletoe bird and other species spread the sticky seeds on their beaks and feet.

These open forests, composed chiefly of trees with light crowns and persistent bark produce very small amounts of litter, less than one quarter of the weight produced by messmate stringybark forests.

There are very few eucalypt seedlings because good crops of seed are rarely produced by the mature trees, the forest floor is not favourable for germination, and the summer climate is harsh. Nearly all the viable seed shed from the trees is removed by ants and other seed harvesting insects. Small seedlings of red ironbark sometimes develop in a wet summer on fresh ash beds where wood and bark have been burned, or in pockets of loose earth washed into hollows. Few survive the soil-moisture stress and high temperatures and many are grazed by rabbits.

Ironbark-box forests are important refuges for wild life in a region of Victoria that otherwise has been largely cleared for pastures. Echidnas live throughout these forests, and the most common native mammals are ringtail and brushtail possums, the yellow-footed phascogale, the tuan, and the grey kangaroo. Squirrel gliders occur in forests where grey box predominates. The ironbark-box forests are important sources of nectar and pollen for commercial colonies of bees.

The eucalypts of the main ironbark-box belt occur in several other localities in Victoria. Yellow box is found in some of the mixed eucalypt forests in the Midlands and east Gippsland. Red ironbark occurs in pure and mixed stands in east Gippsland, near Aireys Inlet, and in the valley of the Lerderderg River. Red box and long-leaved box are widely distributed in the drier mixed forests.

Arid woodlands and heathlands

There are many distinct associations of plants and a wealth of plant species in the forests of the Murray Basin plain. The soils very largely determine the distribution of the various plant associations, and some are confined to one type of soil. Altitude varies from about 350 ft in the south to 150 ft in the centre and north, and the soils vary in texture from sands to clays. In the arid climate of this region forests have the form of low woodlands, mallee woodlands, and mallee heathlands.

Mallee woodland is a dense stand of eucalypts which have a very distinctive form characterised by several thin stems arising from a huge underground lignotuber. The stands are usually 9 to 15 ft in height, with a very sparse understorey. A stand of mallees usually contains several eucalypt species. Yorrell, oil, horned oil, yellow, red, hooked, and dumosa mallees occur throughout the region. Bull mallee is restricted to the south, capped mallee to the north-west, and black mallee box to the south-west and central west.

Yellow mallee is the most common eucalypt in mallee woodland and porcupine grass is the lower stratum. The mallee heathlands have a dense shrub layer in which mallee pine, broom heath-myrtle, broombush, and tea-trees are prominent. Yorrell predominates in those communities which have a dense understorey of salt tolerant shrubs.

In the Big Desert the irregular areas burned by wildfires have produced complex intermingled patterns of regeneration and vegetation change in pine-belah woodland, heaths, mallee woodland, and grassland. Various heaths are dominated by honeysuckle, Murray pine, slaty sheoak, and grass-trees. White cypress pine, belah, and sandalwood occur with scattered mallee eucalypts in the woodland formations. Red stringybark trees are scattered through some patches of mallee. River red gum and black box trees occur in widely distributed localities.

The sandstone rises, box flats, and sandhills of the Little Desert support shrub woodlands, shrub mallee, scrub, dwarf scrub, and heaths which are habitats for many mammals, birds, and reptiles. Wild fires have produced complex patterns of vegetation of varying composition and age. A profusion of more than 670 plant species, including many orchids, lilies, legumes, heaths, composites, and grasses contribute to the diversity of these ecosystems. Green mallee, narrow-leaved mallee, and yellow mallee are the most common eucalypts in the mallee and shrub mallee communities of the Little Desert.

Shrub woodlands dominated by yellow gum and brown stringybark are important habitats for birds and mammals. Dwarf scrub in which banksias, casuarinas, tea-trees, and grass-trees are the largest individual plants, is the last remaining refuge in Victoria for two rare birds, the samphire thornbill and rufous field-wren, which depend upon this particular habitat for shelter and food. Seed of the fringed heath-myrtle, which is abundant in the shrub mallee inhabited by the lowan or mallee fowl, is staple food for the lowan chicks as soon as they emerge from the incubating mound.

The scrub, predominantly broombush, honey-myrtle, and heath myrtle, and the shrub mallee vegetations are also specialised breeding and feeding habitats for birds. They require large areas of these native plant associations for nesting sites and territories in which to feed. Regeneration of broombush after fires provides the habitat for the western whipbird. It is found in areas of very dense waist-high broombush regrowth after recent fires, but is absent from tall stands of broombrush.

Nineteen species of native mammals and twenty-four of reptiles are known to live in the Little Desert. The south-western pigmy possum and Mitchell's hopping mouse, and three of the reptiles, the western blue-tongue lizard, the desert copperhead snake, and the desert snake are probably confined in Victoria to the Little Desert. Brushtail possums, fat-tailed

dunnarts, feathertail gliders, and echidna are common. Black-faced kangaroos are also fairly common, and grey kangaroos move through the desert from time to time. Red kangaroos occur in the dry north-west corner, and red-necked wallabies and sugar gliders are found in the southern parts. Two species of bird, the red-capped robin and the crested bellbird, occasionally venture almost to Port Phillip Bay, by way of the Whipstick mallee near Bendigo, a forest of bull mallee near Bacchus Marsh, and callitris in the You Yangs.

Forest plantations

Species

The area of forest plantations in Victoria is approaching 250,000 acres. Most are softwood plantations established because of the very successful growth of a few introduced species of conifer in earlier years and the need to establish a supply of locally grown commercial softwood timber in the State. Forests of the native conifers, the Murray pine and the mountain plum-pine, were small in area, and only the Murray pine could contribute to any extent to the timber needs. Many species of pine were introduced and used in the search for a suitable tree for Australian conditions. It became apparent in time that the trees which grew naturally in environments that were similar to the messmate stringybark forests were most suited for Victoria.

Radiata pine is pre-eminent as a plantation species for softwood timber production in south-eastern Australia and Western Australia. It is by far the most widely planted and most productive species in Victorian forest plantations. Small areas of Corsican pine have been included in most plantations, and maritime pine is used on light sandy soils in some areas. On very good soils Douglas fir has been planted in limited areas adjacent to the radiata pine. Ponderosa pine was tried extensively, but it grew poorly. Mountain ash is the only native species that has been used extensively as a plantation tree.

Young forests planted since 1960 comprise more than half the area of coniferous plantations, and a large area was planted between 1925 and 1940.

Radiata pine

Distribution

Plantations of radiata pine flourish on sites which once supported brown stringybark and messmate stringybark forests in western Victoria, various stringybark forests in the north-east and Midlands, and mountain ash forest in the Otway Range, and west and south Gippsland. In districts where there are long hot spells in summer, an annual rainfall of at least 30 inches is required for it to grow as a commercial timber crop. Radiata pine thrives on suitable sites from sea level to about 3,000 ft elevation, but at higher elevations it is prone to snow damage on steep slopes, especially by heavy falls of wet snow which break the crowns.

Strains and variability

Radiata pine is a native of small forests at Point Año Nuevo, Monterey, and Cambria in California, and on Guadalupe and Cedros Islands near the Mexican coast. The Point Año Nuevo and Monterey strains are more

suitable for plantations because they grow rapidly for some months after each burst of spring growth.

Radiata pine is a highly variable species. Trees in forest plantations vary in the vigour, shape, and density of their crowns, the number of whorls of branches produced each year, the length of trunk between whorls, the number and thickness of branches and their angle to the trunk, the number of cones formed on the trunk, the straightness and taper of the trunk, and the density of the wood. The wood in most trunks is essentially straight grained but in some it is spiral grained. Seasonal patterns of growth also are inherently variable.

Improved strains of radiata pine for plantation forestry can be developed by systematic selection and breeding. The quality of plantations for timber production can be raised by using seed collected from straight vigorous trees. Families of superior trees can be established with cuttings and grafted seedlings. Controlled cross-fertilisation in breeding arboreta produces superior seed.

Nutrition and soils

Radiata pine tolerates an acid soil well, except where the high acidity results from poor drainage, excessive exchangeable aluminium in the soil, or a low calcium : magnesium ratio. The species has a low tolerance to waterlogging, particularly in heavy clay soils and where there is a perched water table.

Forests of radiata pine remain healthy and vigorous on well drained sites provided soil moisture deficits in spring and summer are slight and the high demand for nutrients is satisfied. The deep coastal sands in western Victoria are deficient in zinc and phosphorus. Young pines are sprayed once with a solution of zinc sulphate to remedy zinc deficiency throughout their life. Zinc deficiency is rare in eastern Victoria. Symptoms of deficiency may show up on soils derived from igneous rocks or strata influenced by igneous activity.

Pines planted in the ash where debris has been consumed by intense fire grow much faster than nearby pines on unburnt areas. Improved availability of soil nutrients and moisture, and partial sterilisation of the soil appear to be contributing causes of the accelerated growth. Some soils in Victoria have supported three successive crops of vigorous radiata pine, but very light sandy soils are suspected of declining in fertility after pine forests have been grown on them and harvested.

The litter-soil zone in a pine plantation is a complex community. Its character alters as the stand develops. The ground between the small trees in a new plantation is covered by grasses and herbs, and a few woody plants. As the pines grow and their crowns form a closed canopy, a litter of needles accumulates and nearly all the understorey plants die out. The loose layer of litter insulates the soil against fluctuations in temperature and moisture. Soils under thick mats of pine needles change progressively ; there are complex differences between the soil under pines and those under native forest. Under pines they contain less organic matter and nitrogen ; the amounts of soluble salts and phosphorus are less ; and the cation exchange capacity is lower. Litter locks up large

amounts of nutrients and their return to the soil is slow. Slow release of nitrogen and phosphorus from the litter can limit pine growth. Fungi are the chief agents which break down the needles and twigs.

Fungi play another important role in the nutrition of the pine. They invade the intercellular spaces in the pine roots without actually entering the cells. The roots release carbohydrate to the fungi, which provide the tree with phosphates. Toadstools are often abundant in radiata pine forests. The gaudy white-flecked red caps of the fly agaric, a very poisonous toadstool, make it the most conspicuous of these colourful gilled fungi. *Lactarius*, which has an orange-red cap with red blotches, and *flamula* which has golden brown caps, are numerous in older pine stands soon after the arrival of the damp autumn weather. Groups of glistening slimy caps of *boletus*, a thick fleshy pore-fungus, are typical members of the radiata pine community. Their honey-brown caps are sometimes a foot in diameter.

Growth

Radiata pine forests achieve rapid rates of growth because the trees have large crowns for photosynthesis, extensive systems of active roots, and the capacity to respond to warm moist conditions early in the growing season with a surge of growth. In favoured localities they grow at all seasons of the year. Well stocked pure stands of vigorous radiata pine produce an annual volume of about 300 cu ft of wood per acre over their life. Production ranges from 210 cu ft in typical plantations in the Ballarat and Macedon districts to 420 cu ft in the Aire River valley. Volume growth is most rapid at about 15 years. The initial density of the stands is about 600 trees per acre but the numbers are reduced by natural competition to about 400 trees per acre. More often the forests are thinned repeatedly after about 15 years of age until crops of 100 trees per acre or fewer remain.

Young radiata pines are very sensitive to competition from weeds. Severe competition from grasses and herbs can kill newly planted stock, and the survivors grow very slowly. Eucalypts and acacias in mixture with pine trees depress the production of pine wood markedly; where there are many such trees in the forest, the production of softwood timber may be as low as 20 per cent of that of a pure stand of pines.

Fauna

Native animals have adapted themselves to living and feeding in pure crops of radiata pine, and in the mixed habitats created where eucalypts, acacias, and other undergrowth plants persist with the pines. Corridors and patches of native vegetation in the pine forests provide diversity of habitat. Lyrebirds live in pine plantations in north-east Victoria and elsewhere. The grey thrush, blue wren, southern yellow robin, and white-winged chough nest in pine forests. The nomadic yellow-tailed black cockatoo rips green cones of Corsican pine and radiata pine to obtain the seeds. Bronze-wing pigeons feed on seed from mature cones on the ground.

Firebreaks surrounding the compartments of pines in the Aire River valley in the Otway Range carry a dense vegetation of blackwood, satin-wood, eucalypts, and other native plants. In the gullies in the forest there

are thickets of musk, blanket-leaf, satinwood, soft tree-fern, and shield fern. Potoroos and possums occur, and grey and mountain thrushes, yellow and pink robins, rufous fantails, and crimson rosellas are common. Echidnas, bats, snakes, lizards, and frogs also live in the pine forests.

Possums and rats feed on the shoots and bark of the pines in several areas. Possums eat pollen cones in early spring. They live in old eucalypt stumps and logs, and also make nests of pine twigs. Water rats live along streams and water races and near fire protection dams. Southern bush-rats are common in some pine forests.

Sirex wood wasp, an insect introduced from Europe, is found in plantations in the central and western districts, around Port Phillip Bay, and in Gippsland. The female wasp bores through the thick bark of the pines with a long serrated ovipositor and lays eggs in tunnels in the wood in summer. The spores of a fungus carried in sirex are introduced into the tree when the eggs are laid. The fungus advances through the wood ahead of the larvae, which make galleries as they feed on the infected wood. Female wasps are attracted first to unhealthy and suppressed trees and to pruning wounds and other resinous surfaces. Vigorous trees in thinned plantations are resistant to sirex infestations. Wood tissues around the egg-tunnel produce much resin which slows down or stops the spread of the fungus.

Sirex populations have been controlled to a considerable degree by parasitic wasps which lay their eggs on sirex eggs or larvae, and also by infecting the sirex with nematodes. A small European wasp, *Ibalia leucospoides*, inserts her slender ovipositor into a sirex egg-tunnel and lays an egg on the sirex egg. Some species of large wasps are able to sense sirex larvae in the wood and bore through the bark and wood with a very long ovipositor to parasitise the larvae with their eggs. *Megarhyssa nortoni nortoni* from California, *Rhyssa persuasoria*, *Rhyssa himalayensis*, and other species of *Rhyssa* have been released. This biological control of an introduced wasp that attacks an introduced tree species by means of introduced parasites is an outstanding achievement in applied biology.

A free-living form of nematode lives on the fungus that is introduced into the pine by the female sirex, and a larger infective form breeds in the sirex larva. Infection of sirex by nematodes has the effect of sterilising the wasps.

Moths, sap-sucking aphids, thrips, and scale insects can disrupt the development of pine buds and foliage, but none has caused widespread damage. Many insects lay eggs on the pines but few are able to feed on them and survive. A native tube moth is slowly adapting itself to slow growing stands of pine south of Ballarat. Its larvae may destroy the new foliage during winter and spring every alternate year. Weakened and killed trees are susceptible to sirex wood wasp during the following summer. A species of bag moth also is an occasional defoliator of radiata pine.

Benefits of pine plantations

Pine forests have added variety to the landscape in many parts of Victoria. Abandoned farmlands have been reforested, and degraded natural bushland has been replaced with valuable timber crops. Increasing numbers

of local residents and travellers appreciate the pine forests for picnics and other recreational uses.

The long-fibred wood of the pines is a versatile medium-density raw material, being used for sawn timber, plywood, papers and other pulp products, particle boards, poles and piles, and small round timbers. Sawn and round timbers are impregnated with creosote or waterborne salts to endow the wood with durability against fungi, insects, and marine borers.

Catchment areas where radiata pine forests are growing on deep soils in high rainfall areas have water yields similar to those from eucalypt forests. Where radiata pine forests have replaced native forest in the 25 to 30 inch annual rainfall zone there has been no appreciable alteration of streamflow, because rainfall and solar radiation are the main determinants of streamflow, and run-off and evaporation are largely independent of forest type.

Conclusion

The forests of Victoria are a priceless renewable resource. They protect the water catchments upon which cities and towns, industries, and farmlands depend for their prosperity. They provide a supply of wood and other forest products of many species for traditional and new markets. The diverse forest habitats are a haven for populations of native animals. Riverine and other woodlands provide grazing for cattle and sheep, particularly in times of drought.

The forests offer a remarkable variety of ecosystems for man to study and enjoy. Within relatively short distances in Victoria there are dark and mossy rain forests, lofty cool mountain forests with dense tall understoreys, quiet pine forests with spicy air and a soft litter of needles, stringybark-gum forests with a profusion of wildflowers and green panoramas over the foothills, and dry woodlands where undergrowth is sparse and litter scanty. State forests and forest parks are attracting increasing numbers of people who value the wide range of recreational opportunities that forests offer. Forests cater for the needs of hikers, anglers, artists, naturalists, photographers, youth camps, military manoeuvres, and the general tourist in all seasons of the year. Snowfields in the forests have been developed as ski resorts.

The virgin forests abundantly served the needs of the early Colony and the developing State. The northern and coastal forests yielded large volumes of strong, durable timbers for bridges, railways, wharves, telephone and electricity systems, and for fencing pastures and crops. The central stringybark and mountain ash forests supplied hewn and sawn timbers for houses, public buildings, and factories. Fuel wood and charcoal from the forests satisfied constant domestic and industrial markets. Tradesmen learned to use the unfamiliar woods of the native forests for furniture, boats, and vehicles. The forests yielded tannins and medicinal and industrial leaf oils for local use and for export.

Many regrowth forests, especially the mountain ash forests which regenerated after widespread fires in the 1920s and 1930s, are being managed to supply large sawmills, pulp mills, and other timber-using industries. Others will provide for bee keeping and grazing, and will yield a range of forest products for local use. Some are managed to conserve

unique habitats for flora and fauna and for scientific studies, and as forest parks and other special recreation areas. All are managed so that they will protect water catchments adequately.

The pine and other softwood forests, and the new plantations that are being established by the State and by private companies, will provide various classes of wood for existing and new industries, principally in the south-western coastal districts, Gippsland, and in the north-east. Softwoods for particle boards, papers and other pulp products, sawn timber, plywood, poles and other round timbers are increasingly contributing to the State's economy.

Forests must be properly managed to improve their health and productivity, and to conserve them for future generations. Modern forest management draws heavily on the skills of biologists, economists, fire environment ecologists, wood technologists, marketing specialists, and on the particular aptitudes and training of field foresters. Modern technology finds many applications in forest protection, the regeneration and silviculture of timber crops, harvesting operations, and conservation of the forest environment.

List of plants

Alpine ash
Austral mulberry
Austral snow grass

Banyalla
Belah
Bitter-pea
Black box
Black mallee box
Black oliveberry
Black sallee
Black wattle
Blackwood
Blanket-leaf
Blakely's red gum
Blue gum
Boletus
Bracken (fern)
Broad-leaved peppermint
Broombush
Broom heath-myrtle
Brownbarrel
Brown stringybark
Bull mallee
Bush-peas

Cabbage fan palm
Candlebark
Capped mallee
Cherry ballart
Christmas bush
Clematis
Common cassinia
Common correa
Common heath
Coral fern
Corsican pine
Cross-leaf honey-myrtle
Cumbungi

Daphne heath
Dargo gum

Eucalyptus delegatensis R. T. Bak.
Hedycarya angustifolia A. Cunn.
Poa australis, sp. agg.

Pittosporum bicolor Hook.
Casuarina cristata Miq.
Daviesia corymbosa Sm. var. *laxiflora* J. H. Willis
Eucalyptus largiflorens F. Muell.
Eucalyptus porosa F. Muell. Miq.
Elaeocarpus holopteleus F. Muell.
Eucalyptus stellulata Sieb. ex DC.
Acacia mearnsii de Wild.
Acacia melanoxylon R.Br.
Bedfordia salicina DC.
Eucalyptus blakelyi Maiden
Eucalyptus stjohnii (R. T. Bak.) R. T. Bak.
Boletus luteus
Pteridium esculentum (Forst.f.) Nakai
Eucalyptus dives Schau.
Melaleuca uncinata R.Br.
Baeckea behrii F. Muell.
Eucalyptus fastigata Deane et Maiden
Eucalyptus baxteri (Benth.) Maiden et Blakely
Eucalyptus behriana F. Muell.
Pultenaea spp.

Livistona australis Mart.
Eucalyptus rubida Deane et Maiden
Eucalyptus pileata Blakely
Exocarpos cupressiformis Labill.
Prostanthera lasianthos Labill.
Clematis aristata R.Br.
Cassinia aculeata R.Br.
Correa reflexa (Labill.) Vent. var. *reflexa*
Epacris impressa Labill.
Gleichenia circinata Swartz
Pinus nigra (Arnold) var. *maritima* (Ait.) Poir.
Melaleuca decussata R.Br.
Typha angustifolia L.

Brachyloma daphnoides Benth.
Eucalyptus perriniana F. Muell. ex Rodway

Dodder-laurel
Douglas fir
Dumosa mallee

Cassytha melantha R.Br.
Pseudotsuga menziesii (Mirb.) Franco
Eucalyptus dumosa A. Cunn ex Schau.

Early hickory wattle
Elderberry panax

Acacia obliquinervia M. D. Tindale
Tieghemopanax sambucifolius Viguer

Flammula
Flat-pea
Flax acacia
Fly agaric
Forest red gum
Fringed heath-myrtle

Flammula excentrica Clel. et Ceel.
Platylobium formosum Sm.
Acacia linearis Macbride
Amanita muscaria (L.) Fr.
Eucalyptus tereticornis Sm.
Micromyrtus ciliatus J. M. Black

Golden shaggy-pea
Golden wattle
Gorse bitter-pea
Grampians fringe-myrtle
Grampians gum
Grampians thryptomene
Grass-trees
Green mallee
Grey box

Oxylobium ellipticum R.Br.
Acacia pycnantha Benth.
Daviesia ulicina Sm.
Calytrix sullivanii F. Muell.
Eucalyptus alpina Lindl.
Thryptomene calycina Stapf.
Xanthorrhoea spp.
Eucalyptus viridis R. T. Bak.
Eucalyptus microcarpa Maiden

Hard water-fern
Hazel pomaderris
Heath-myrtles
Hickory wattle
Honey-myrtles
Honeysuckle
Hooked mallee
Hop bitter-pea
Hop-bushes
Hop goodenia
Horned oil mallee

Blechnum procerum (Forst.f.) Swartz.
Pomaderris aspera Sieb ex DC.
Baeckea spp.
Acacia falciformis DC.
Melaleuca spp.
Banksia spp.
Eucalyptus leptophylla Miq.
Daviesia latifolia R.Br.
Dodonaea spp.
Goodenia ovata Sm.
Eucalyptus oleosa var *glauca* Maiden

Kanooka

Tristania laurina R.Br.

Lactarius
Leafy bossiaea
Lignum
Lilly pilly
Long-leaf mistletoe
Long-leaved box

Lactarius deliciosus (L.) Fr.
Bossiaea foliosa A. Cunn.
Muehlenbeckia sp.
Acmena smithii (Poir) Merr. et Perry
Loranthus miquelii Lehm.
Eucalyptus goniocalyx F. Muell. ex Miq.

Mallee pine
Manna gum
Maritime pine
Mealy stringybark
Messmate stringybark
Mint-bushes
Moir grass
Mountain ash
Mountain grey gum
Mountain gum
Mountain pepper
Mountain plum-pine
Murray pine
Musk (daisy-bush)
Myrtle beech

Callitris verrucosa (A. Cunn. ex Endl.) F. Muell.
Eucalyptus viminalis Labill.
Pinus pinaster Ait.
Eucalyptus cephalocarpa Blakely
Eucalyptus obliqua L'Herit.
Prostanthera spp.
Pseudoraphis spinescens (R.Br.) J. W. Vickery
Eucalyptus regnans F. Muell.
Eucalyptus cypellocarpa L. A. S. Johnson
Eucalyptus dalrympleana Maiden
Drimys lanceolata (Poir.) Baill.
Podocarpus lawrencei Hook.f.
Callitris preissii Miq.
Olearia argophylla (Labill.) F. Muell. ex Benth.
Nothofagus cunninghamii (Hook.) Oierst.

Narrow-leaf geebung
Narrow-leaved mallee
Narrow-leaved peppermint
Native hibiscus
Needle rush

Persoonia linearis Andr.
Eucalyptus cneorifolia DC.
Eucalyptus radiata Sieb ex DC.
Howittia trilocularis F. Muell.
Eleocharis acuta R.Br.

Oil mallee
Oyster Bay pine

Parrot-peas
Pomaderris
Ponderosa pine
Porcupine grass
Prickly coprosma
Prickly tea-tree

Radiata pine
Red bloodwood
Red box
Red ironbark
Red mallee
Red stringybark
River peppermint
River red gum
Rough-barked apple
Rough tree-fern

Sandalwood
Satinwood
Saw banksia
Scent bark
Scented paperbark
Shaggy-peas
Shield fern
Shining cassinia
Shining gum
Shining peppermint
Shiny tea-tree
Silver banksia
Silvertop ash
Silver wattle
Skirted tree-fern
Slaty sheoak
Smooth nettle
Snow gum
Soft tree-fern
Southern mahogany
Southern sassafras
Sphagnum moss
Sunshine wattle
Swamp gum
Sweet bursaria
Sweet pittosporum

Tea-trees
Tecoma

Waratah
Wattles
White box
White brittle gum
White cypress pine
White stringybark
Wiregrass

Yellow box
Yellow gum
Yellow mallee
Yellow-wood
Yellow stringybark
Yertchuk
Yorrell

Eucalyptus oleosa F. Muell.
Callitris rhomboidea R.Br.

Dillwynia spp.
Pomaderris apetala Labill.
Pinus ponderosa Dougl.
Triodia irritans R.Br.
Coprosma billardieri Hook.f.
Leptospermum juniperinum Sm.

Pinus radiata D. Don
Eucalyptus gummifera (Gaertn.) Hochr.
Eucalyptus polyanthemus Schau.
Eucalyptus sideroxylon A. Cunn. ex Woolls
Eucalyptus calycogona Turcz.
Eucalyptus macrorhyncha F. Muell. ex Benth.
Eucalyptus elata Dehnh.
Eucalyptus camaldulensis Dehnh.
Angophora floribunda (Sm.) Sweet
Cyathea australis (R.Br.) Domin

Myoporum platycarpum R.Br.
Phebalium squameum (Labill.) Druce
Banksia serrata L.f.
Eucalyptus aromaphloia L. D. Pryor and J. H. Willis
Melaleuca squarrosa Sm.
Oxylobium spp.
Polystichum aculeatum (L.) Schott
Cassinia longifolia R.Br.
Eucalyptus nitens Maiden
Eucalyptus nitida Hook.f.
Leptospermum nitidum Hook.f.
Banksia marginata Cav.
Eucalyptus sieberi L. Johnson
Acacia dealbata Link
Cyathea marcescens N. A. Wakefield
Casuarina muelleriana Miq.
Australina muelleri Wedd.
Eucalyptus pauciflora Sieb. ex Spreng.
Dicksonia antarctica Labill.
Eucalyptus botryoides Sm.
Atherosperma moschatum Labill.
Sphagnum cristatum Hpe.
Acacia botrycephala (Vent.) Desf.
Eucalyptus ovata Labill.
Bursaria spinosa Cav.
Pittosporum undulatum Vent.

Leptospermum spp.
Tecoma australis R.Br.

Telopea oreades F. Muell.
Acacia spp.
Eucalyptus albens Benth.
Eucalyptus mannifera Mudie
Callitris columellaris F. Muell. sens. lat.
Eucalyptus globoidea Blakely
Tetrarrhena juncea R.Br.

Eucalyptus melliodora A. Cunn. ex Schau.
Eucalyptus leucoxydon F. Muell.
Eucalyptus incrassata Labill.
Acronychia laevis Forst. et Forst.f.
Eucalyptus muelleriana Howitt
Eucalyptus consideniana Maiden
Eucalyptus gracilis F. Muell.

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GEOGRAPHICAL FEATURES

Area and boundaries

Victoria is situated at the south-eastern extremity of the Australian continent, of which it occupies about a thirty-fourth part and covers about 87,884 square miles or 56,245,760 acres.

The following table shows the area of Victoria in relation to that of Australia :

AUSTRALIA—AREA OF STATES AND TERRITORIES

State or Territory	Area	Percentage of total area
	sq miles	
Western Australia	975,920	32.88
Queensland	667,000	22.47
Northern Territory	520,280	17.53
South Australia	380,070	12.81
New South Wales	309,433	10.43
Victoria	87,884	2.96
Tasmania	26,383	0.89
Australian Capital Territory	939	0.03
Total Australia	2,967,909	100.00

Victoria is bounded on the north and north-east by New South Wales, from which it is separated by the Murray River and a boundary about 110 miles

long running north-westerly from Cape Howe to the nearest source of the Murray River, being a point known as The Springs, on Forest Hill. All the waters of the Murray River are in New South Wales, the State boundary being the left bank of the stream. The total length of the New South Wales boundary is about 1,175 miles.

On the west the State is bounded by South Australia and on the south by the Indian Ocean and Bass Strait. Its greatest length from east to west is about 493 miles, its greatest breadth about 290 miles, and its extent of coastline 980 miles, including the length around Port Phillip Bay 164 miles, Western Port 90 miles, and Corner Inlet 50 miles. Great Britain, inclusive of the Isle of Man and the Channel Islands, contains 88,119 square miles, and is therefore slightly larger than Victoria.

The most southerly point of Wilsons Promontory, in latitude 39 deg 8 min S., longitude 146 deg 22½ min E., is the southernmost point of Victoria and likewise of the Australian continent; the northernmost point is where the western boundary of the State meets the Murray, latitude 34 deg 2 min S., longitude 140 deg 58 min E.; the point furthest east is Cape Howe, situated in latitude 37 deg 31 min S., longitude 149 deg 59 min E. The westerly boundary lies upon the meridian 140 deg 58 min E., and extends from latitude 34 deg 2 min S. to latitude 38 deg 4 min S.—a distance of 280 miles.

Physical divisions

This article should be read in conjunction with the articles on physical environment and land use, area, and climate.

The chief physical divisions of Victoria are shown on the map (Figure 1). Each of these divisions has certain physical features which distinguish it from the others as a result of the influence of elevation, geological structure, climate, and soils. The following divisions are recognised :

1. *Murray Basin Plains :*

- (a) The Mallee
- (b) The Murray Valley
- (c) The Wimmera
- (d) The Northern District Plains

2. *Central Highlands :*

- A. The Eastern Highlands, within which
 - (a) the Sandstone Belt and
 - (b) the Caves Country may be distinguished from the remainder
- B. The Western Highlands :
 - (a) The Midlands
 - (b) The Grampians
 - (c) The Dundas Highlands

3. *Western District Plains :*

- (a) The Volcanic Plains
- (b) The Coastal Plains

4. *Gippsland Plains :*

- (a) The East Gippsland Plains
- (b) The West Gippsland Plains

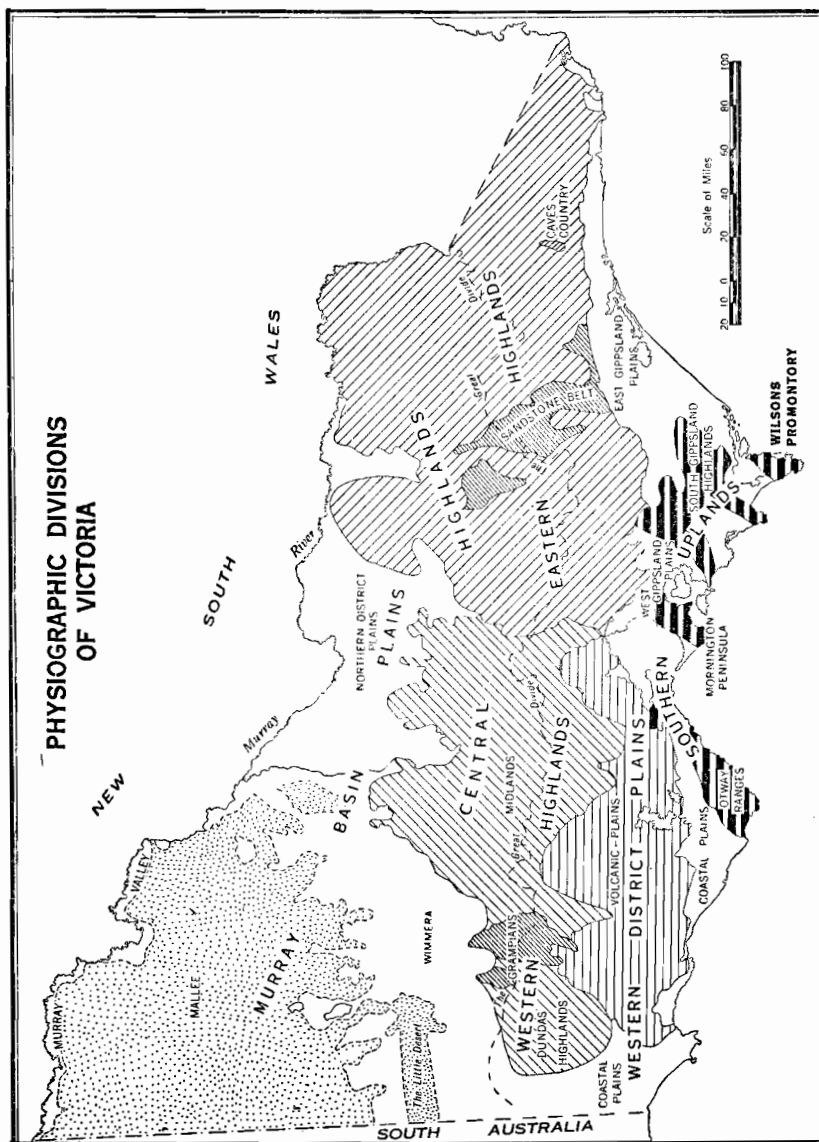


FIGURE 1.

5. Southern Uplands :

- (a) The Otway Ranges
- (b) The Barabool Hills
- (c) The Mornington Peninsula
- (d) The South Gippsland Highlands
- (e) Wilsons Promontory

Murray Basin Plains

These plains include the Mallee, the Wimmera, the Northern District Plains, and the Murray Valley itself. The most noticeable distinguishing

features of the Mallee are the soils, vegetation, and topography. It is not a perfect plain, but exhibits broad low ridges and depressions which appear to be due to folding and faulting of the rocks. Sand ridges trending due east and west are an indication of a former more arid climate, but they are now fixed by vegetation. When cleared, the sand distributes itself irregularly without forming new ridges. There is evidence of a succession of former wet and dry periods in the Mallee, but at the present time all the streams that enter it lose so much water by evaporation and percolation that they fail to reach the Murray and terminate in shallow lakes, many of which are salt. The Murray Valley itself is cut into the higher Mallee land and is subject to periodic flooding by the river.

The Northern District Plains are formed from the combined flood plains of rivers flowing to the Murray, with an average gradient of between 3 and 5 ft to the mile, the surface being almost perfectly flat except where small residual hills of granite rise above the alluvium as at Pyramid Hill.

The Wimmera lies between the Western Highlands and the Mallee and is also composed mainly of river plains, except to the north of the Glenelg where old abandoned river channels contain a succession of small lakes. Most of the lakes of the Murray Basin Plains have crescentic loam ridges (lunettes) on their eastern shores.

Central Highlands

The Central Highlands form the backbone of Victoria, tapering from a broad and high mountainous belt in the east until they disappear beyond the Dundas Highlands near the South Australian border. They were formed by up-warping and faulting. The Eastern Highlands differ from the Western in their greater average elevation, with peaks such as Bogong, Feathertop, and Hotham rising above 6,000 ft, while the Western Highlands are generally lower, the peaks reaching above 3,000 ft, and the valleys being broader. Also, in the Eastern Highlands patches of Older Volcanic rocks occur, whereas in the Western the volcanic rocks belong mainly to the Newer Volcanic Series. Several well known volcanic mountains are still preserved, Mounts Buninyong and Warrenheip near Ballarat being examples.

Because of the great variety of geological formations in the Central Highlands and the effects of elevation and deep dissection by streams, the features of the country are very varied and there are many striking mountains and gorges. The severe winter climate, with heavy snow on the higher land, is also a special feature of the Eastern Highlands. Included in the area are several high plains such as those near Bogong and the Snowy Plains. Caves are well known in the limestone around Buchan.

In the Western Highlands the Grampians, with their striking serrate ridges of sandstone, may be compared with the belt of sandstone stretching from Mansfield to Briargolong in the east.

The Dundas Highlands are a dome which has been dissected by the Glenelg and its tributaries, the rocks being capped by ancient laterite soils which form tablelands with scarps at their edges.

Western District Plains

Many of the surface features of the Western District Plains are a result of volcanic activity, very large areas being covered with basalt flows of the Newer Volcanic Series above which prominent mountains rise, many of

Forests of Victoria

Myrtle beech and tree ferns in rain forest at Cement Creek.





Snow gum in sub-alpine woodland
on Snowy Range.



Alpine ash forest at Mount Arbuckle.



Mountain ash forest at Noojee.

River red gum forest on the flood plain of the Murray River at Barmah.





Messmate stringybark forest in the Grampians.

Messmate stringybark and narrow-leaved peppermint at Daylesford.





Silvertop ash with southern mahogany at Orbost.



Manna gum forest at Mount Macedon.



Forest plantation of radiata pines at Macedon.



Corsican and radiata pines at Macedon.



Woodland of yellow gum at Dimboola.



Forest red gum at Briagolong.



Red ironbark and grey box forest at Rushworth.

them with a central crater lake. Some of the youngest flows preserve original surface irregularities practically unmodified by erosion, thus forming the regions known as "stony rises".

The coastal plains of the Western District are for the most part sandy, the soils being derived from Tertiary and Pleistocene sedimentary deposits, which in places attain a thickness of some 5,000 ft, and yield considerable quantities of artesian water.

Gippsland Plains

Continuing the east-west belt of plains on the eastern side of the drowned area represented by Port Phillip Bay and Western Port are the Gippsland Plains. These are underlain by marine and non-marine Tertiary and Pleistocene sedimentary deposits, including the thick seams of brown coal of the La Trobe Valley. A notable feature is the Ninety Mile Beach and the lakes and swamps that lie on its landward side. This beach is an offshore bar on which aeolian sand ridges have accumulated.

Southern Uplands

Lying to the south of the plains above mentioned is a group of uplifted blocks for which faulting is mainly responsible, these constituting the Southern Uplands. The Otway Ranges and the South Gippsland Highlands are composed of fresh water Mesozoic and Tertiary sediments with Older Volcanic basalts in south Gippsland, and the Mornington Peninsula is an upraised fault block of complex geology, including granites. The Sorrento Peninsula is entirely composed of Pleistocene calcareous dune ridges which have been responsible for practically blocking the entrance to Port Phillip Bay.

Physical environment and land use

The Central Highland Zone (see Figure 1) is the dominant physiographic region of Victoria. The greatest importance of these Highlands is their influence on the drainage pattern of the State. They act as a drainage division and catchment areas between the long north and north-west flowing rivers which are part of the Murray System and the shorter south flowing rivers.

The Highlands are divided into two parts by the 1,200 ft Kilmore Gap, a natural gateway for transport routes leading north from Melbourne.

Eastern Highlands

To the east, the Eastern Highlands form a broad, rugged region of deeply dissected high plateaux with elevations of up to 6,000 ft. They form a barrier to east-moving air masses, giving rise to heavy orographic rainfall of over 50 inches a year in the higher parts. This is the wettest part of the State, and is the coldest region in winter with substantial snowfalls at higher elevations, a factor enabling the development of skiing resorts at locations such as Mt Buffalo, Mt Buller, Mt Hotham, and Falls Creek. Because of the elevation, this is also the coolest part of the State in summer. The rugged topography and dense forest cover of the Eastern Highlands makes them rather inaccessible and of little agricultural potential, so that they are the only large area of Victoria that is very sparsely settled and almost devoid of transport routes. However, the foothill zone adjoining the East Gippsland Plains is an important forestry area, while the lower

slopes and valleys are used for grazing, particularly of cattle. High alpine grassland areas in the north-east, such as the Bogong High Plains, are used for summer grazing, this area being one of the rare cases of a transhumance farming economy in Australia. The high run-off and steep stream gradients have made the Eastern Highlands important for water storage and hydro-electricity generation at Kiewa, Eildon, and Rubicon.

Western Highlands

West of the Kilmore Gap, the Western Highlands are much lower than those to the east. These Highlands culminate in the west in a series of block mountains, of which the Grampians and the Dundas Highlands form the final western outlines of the Highland Zone. Stream gradients are more gentle than in the Eastern Highlands, so that hydro-electricity potential is low. However, the Rocklands Dam and the Eppalock and Cairn Curran Reservoirs are important storages for water supply to farms of the northern plains of Victoria.

The Western Highlands, because of their lower elevation, have a lower rainfall than the Eastern Highlands, and they do not act as a barrier to settlement and transport. The reasonably reliable rainfall of 20 inches to 30 inches a year, cool winters, warm summers, rolling topography, open dry sclerophyll forest and grasslands, and moderately fertile, although thin, volcanic soils offer an environment suitable for sheep grazing for wool and fat lambs, fodder cropping, dairying, and potato growing. Early settlement of the area was stimulated by the gold discoveries of the 1850s and 1860s in the Ballarat and Bendigo districts, and these two cities have developed as important regional centres. Castlemaine, Maryborough, and Clunes are additional service centres.

Murray Basin Plains

North of the Central Highland Zone are the flat Murray Basin Plains (see Figure 1). The western section is comprised of the Mallee-Wimmera Plain, characterised by areas of east-west running sand ridges, grey-brown and solonised Mallee soils, and some areas of sandy wastelands. Rainfall is around 20 inches a year in the southern Wimmera, but it decreases to under 10 inches a year in the north-western Mallee, which is the driest area of the State. As well as being low, rainfall is erratic and unreliable in the Mallee-Wimmera, but the warm winters and hot summers ensure a year round growing season where water is available. Early farms were too small, and over-cropping led to widespread crop failures and soil erosion. Since the 1930s farming here has become more stable as a result of the provision of adequate and assured water supplies from the Mallee-Wimmera Stock and Domestic Water Supply System, larger farms of over 1,000 acres, crop rotations, the development of a crop-livestock farming pattern, the use of superphosphate and growing of legumes to maintain soil fertility, and soil conservation practices. The winter rainfall maximum and dry summer harvesting period, the good rail and road network and bulk handling facilities, and scientific farming techniques have enabled the Wimmera to become a region of high-yielding wheat and mixed farms. The drier areas of the Mallee are characterised more by larger sheep properties.

Of great significance in the Mallee are the irrigation areas of the Mildura-Merbein-Red Cliffs and Swan Hill districts, with close settlement farming growing vines and fruits. Mildura, Ouyen, Swan Hill, Horsham, Warracknabeal, and St Arnaud are the main regional centres of the Mallee-Wimmera Plains.

The Northern District Plains form the narrower eastern section of the Murray Basin Plains. Here rainfall increases from 15 inches a year in the western part to over 30 inches a year in the eastern part of the plain adjoining the Eastern Highlands. Rainfall is more reliable than in the Mallee-Wimmera District. However, there is generally a summer water deficiency which restricts pasture growth, so that the Northern District Plains are characterised by extensive grazing and mixed wheat-sheep farms. Recently there has been increasing emphasis on "ley" farming (i.e., rotation of crops and pastures) in order to increase carrying capacities and productivity. The higher, eastern section of the Northern District Plains with more reliable rainfall is one of the best sheep and cattle grazing areas in the State.

There is a marked contrast in the Northern District Plains between the "dry" farming areas and those closely settled irrigation areas of the Murray and its tributaries, especially in the Kerang, Echuca-Rochester, Kyabram-Shepparton, and Cobram-Yarrawonga areas using water from the Loddon, Campaspe, Goulburn, and Murray Rivers, respectively. Fruits, vegetables, hops, and tobacco growing with local specialisations, and dairying based on improved pastures are the main activities in the irrigated districts. Shepparton has become an important centre for canned and frozen fruits and vegetables. These areas are also important as suppliers for the metropolitan fresh fruit and vegetable market.

In the Northern District Plains Shepparton, Wangaratta, and Benalla are large and expanding regional centres with manufacturing industries, while Echuca, Rochester, Kyabram, and Wodonga are smaller service centres with a small range of urban functions.

Coastal Region

South of the Central Highland Zone, coastal Victoria is readily divided into three regions.

The first of these is Port Phillip Bay and environs, bounded by the You Yang Range and Keilor Plain in the west, the Central Highlands in the north, the Dandenong Range and West Gippsland Plain in the east, and the Mornington Peninsula in the south-east. Melbourne, Geelong, and the developing Western Port area provide port facilities in this region. This region is dominated by the urban areas of Melbourne, which is the hub of the State's transport system, and Geelong. The urban areas are surrounded by intensively farmed rural landscapes in which market gardening is important in addition to cattle and sheep fattening, dairying, and fodder cropping. The bayside beach resorts and the seaside resorts of the Mornington Peninsula are the centre of an important tourist industry.

The second region of coastal Victoria is the extensive volcanic plain stretching westwards from the Port Phillip region. This is possibly the best agricultural region in Victoria. The rolling surface is characterised by volcanic plains and cones, lakes, and stony rises, with rich but shallow volcanic soils. Rainfall is above 20 inches a year in all areas, with a slight

winter-spring maximum, and temperatures are warm in summer and mild in winter so that year round pasture growth and cropping are possible. Western District farms produce cattle, sheep for wool and fat lambs, fodder crops, and potatoes. This is also an important dairying district. Rural population densities, as well as those of the west Gippsland dairying country, are second highest in the State after the northern irrigation districts. Colac, Warrnambool, Portland, Hamilton, and Camperdown are the main regional centres. Portland has recently developed modern port facilities.

South of the Western District Plains lie the Otway Ranges, a sparsely populated region of rugged scenery and very high rainfall. The coastline between Anglesea and Apollo Bay has a number of popular tourist resorts.

The third region of coastal Victoria is Gippsland. Immediately east of the Bay are the West Gippsland Plains, which are sandy in their western section where large areas of swamp have been drained for market gardening. The South Gippsland Highlands, a sparsely populated area of little agricultural potential, is bounded by the West Gippsland Plain and to the east by a fault trough stretching from Warragul to the La Trobe Valley (included in East Gippsland Plains in Figure 1). The fault trough with its rolling hills, 30 inch rainfall, and year round pasture, is among the best dairying country on the Australian mainland, supplying the metropolitan wholemilk market. The La Trobe Valley towns have experienced rapid post-war development as a result of the brown coal mining operations in the Yallourn-Morwell area.

East of the La Trobe Valley, rainfall decreases to below 30 inches a year between Traralgon and the Gippsland Lakes. Here the coastline is characterised by sand dunes and lagoons, backed by the riverine plains of the La Trobe, Macalister, Avon, and Mitchell Rivers. The relatively low rainfall necessitates irrigation for cropping. Irrigated farming in the Sale-Maffra, Bairnsdale, and (further east) Orbost districts is based on maize, bean, potato, and fodder growing. Elsewhere the main land use is cattle and sheep grazing.

The plains narrow east of Lakes Entrance when the coastline becomes one of alternating river valleys and hilly headlands where the Eastern Highlands protrude south to the sea. Forestry is the main activity here, with some grazing and fodder cropping in the valleys and foothills. Tourism is important in the area around Lakes Entrance, which is also a fishing port. Gippsland is linked with Melbourne by the Princes Highway and by rail as far east as Orbost.

Mountain regions

The mountainous regions of Victoria comprise the Central Highlands and a belt known as the Southern Uplands lying to the south and separated from the Central Highlands by plains.

The Central Highlands form the backbone of Victoria, tapering from a broad and high mountainous belt in the east until they disappear near the South Australian border. In the eastern sector patches of Older Volcanic rocks occur and peaks rise over 6,000 ft, while in the western sector the volcanic rocks belong mainly to the Newer Volcanic Series and the peaks reach 3,000 ft.

The Highlands descend to plains on their southern and northern flanks.

On the south are the Western District Plains and the Gippsland Plains, and beyond these again rises a group of uplifted blocks constituting the Southern Uplands. The Otway Ranges and the hills of south Gippsland are composed of fresh water Mesozoic sediments and Tertiary sands and clays with Older Volcanic rocks in south Gippsland, and the Mornington Peninsula is an upraised fault block of complex geology, including granites.

By 1875 the mountainous areas of the State were embraced by a geodetic survey which had been started in 1856. This was the first major survey, although isolated surveys had been carried out as early as 1844. Further surveys were carried out by the Australian Survey Corps during the Second World War, and by the Department of Lands and Survey in the post-war years. Most recent values for some of the highest mountains in Victoria are Mt Bogong, 6,516 ft; Mt Feathertop, 6,307 ft; Mt Nelse, 6,181 ft; Mt Fainter, 6,157 ft; Mt Loch, 6,152 ft; Mt Hotham, 6,108 ft; Mt Niggerhead, 6,048 ft; Mt McKay, 6,045 ft; Mt Cobberas, 6,030 ft; Mt Cope, 6,026 ft; Mt Spion Kopje, 6,025 ft; and Mt Buller, 5,919 ft.

Further reference, 1962

Conservation on the Victorian coast

The ocean coast of Victoria is about 682 miles long, and to this may be added the shorelines of Port Phillip Bay (164 miles), Western Port (186 miles, including French Island), and Corner Inlet (300 miles, including the intricate island shores off Port Albert). In addition, there are shorelines of estuaries and coastal lagoons, the most extensive of which are the Gippsland Lakes, with a shoreline length exceeding 200 miles. Articles in previous *Year Books* have dealt with the geology, the geomorphology, and the plant ecology of the coast, indicating the rich variety of natural features found on this relatively short sector of the Australian coast. Here, as on other parts of the Australian coast, there has been increasing pressure for the development of coastal resources with demands that coastal land be utilised for port and industrial development, urban growth, and resort and recreational development. On the other hand, there have been demands for greater attention to the conservation of natural scenery and biological resources, and the attempt to reconcile these competing claims has led to recognition that planning is necessary to ensure a satisfactory pattern of coastal utilisation and development.

In one respect, Victoria has been particularly fortunate. In 1879 the Government decided that, with the exception of a few small areas that had already passed into private ownership, the coastal fringe of Victoria should remain Crown land, comprising foreshores reserved for (generally unspecified) public purposes under the jurisdiction of the Lands Department. In Victorian legislation the term "foreshore" (restricted in scientific usage to the zone between high and low tide marks) is generally taken to include also the coastal margin, inland as far as the boundary of the nearest freehold land. Thus Victoria has been able to avoid the problem where a programme of coastal conservation is impeded by the fact that long sectors of the coastline are in private ownership. But this freedom from private ownership carries with it a responsibility for individuals, organisations, and local and State authorities to see that the coast is wisely used, and to minimise damage and disturbance in the coastal environment.

Responsible authorities

Several authorities are responsible for the utilisation and management of the Victorian coast. There are 42 coastal municipalities, ten of them in the Melbourne metropolitan area, and an unincorporated area, French Island in Western Port. Under the *Land Act* 1958 committees of management are appointed to administer defined foreshore reserves : in many but not all cases, municipal councils have been appointed as the committees of management. The committees are required to provide facilities for visitors, including car parks and camping grounds, and at the same time to maintain the attractions of their coastal scenery by conserving vegetation, preventing erosion, and keeping the area tidy. The overall pattern of coastal development is guided by planning schemes drawn up by local municipalities and the Town and Country Planning Board : once approved, a planning scheme can only be changed with the approval of the Governor in Council. Several planning schemes are now approved and in operation, while on sectors of the coast where a planning scheme is still being prepared development is controlled by the terms of an interim development order. In addition, regional planning authorities are being formed to deal with specific regions. The first of these, established in 1969, is the Western Port Regional Planning Authority. A framework for planned development is thus coming into existence for the coast of Victoria, and should provide a means of achieving a balanced programme of utilisation and conservation.

The coast of the Melbourne metropolitan area also includes sectors under the jurisdiction of the Melbourne Harbor Trust and the St Kilda Foreshore Trust, and is subject to the Melbourne and Metropolitan Planning Scheme. The Port Phillip Authority is essentially an advisory body concerned with the coast of Port Phillip Bay and the ocean coast between Barwon Heads and Cape Schanck : its aim is to guide and co-ordinate development and conservation by the various municipalities and foreshore committees within this area ; much of Corio Bay, on the western side of Port Phillip Bay, is under the jurisdiction of the Geelong Harbor Trust, and the Portland Harbor Trust is similarly responsible for a sector in Portland Bay. A number of small coastal areas, mainly lighthouse reserves, are under the control of the Commonwealth of Australia. These include the western tip of the Nepean Peninsula, adjacent to the entrance to Port Phillip Bay, the site of a quarantine station and an Army officer cadet school.

Sectors of the coast within areas designated as national parks are under the management of the National Parks Authority, and similar sectors within State wildlife reserves (game reserves and faunal reserves) are managed by the Fisheries and Wildlife Department. Inevitably, a number of other departments are concerned with specific aspects of the coastal environment : the Melbourne and Metropolitan Board of Works is responsible for the protection and improvement of a 49 mile sector on the northern shore of Port Phillip Bay and for the treatment and disposal of sewerage from the metropolitan area ; the Public Works Department takes care of shore protection works on much of the Victorian coast ; the Soil Conservation Authority carries out anti-erosion works in the coastal fringe, especially on dune terrain ; the State Rivers and Water Supply Commission is concerned, together with a number of local and regional authorities, with the provision of water supply and sewerage for coastal townships ; the Land Conservation Council studies areas of Crown land and advises the Minister for Lands concerning its appropriate future use ; and the Environ-

ment Protection Authority will control the discharge of wastes into the environment to prevent or control pollution and to protect or improve the environment. Other authorities connected with activities and developments affecting the coast include the Mines Department, the Country Roads Board, the Forests Commission, and the Tourist Development Authority. Co-ordination of the aims and requirements of so many authorities is not a simple task: the Port Phillip Bay Authority does this for a particular coastal sector, and the various other planning authorities have been suggested to act as co-ordinating authorities on other parts of the coast, such as the Gippsland Lakes area. In addition, the Town and Country Planning Board can now prepare statements of planning policy for any area of the State which when approved become government policy for the planning of the area or resource concerned. The Board is currently studying the Victorian coast for this purpose.

National parks

Almost 120 miles of the Victorian coastline is now included in national parks. The largest of these is Wilsons Promontory, a magnificent national park by any standard, with a rocky granite coastline, sandy coves, and small areas of salt marsh and mangrove swamp on its northern boundary shore; the adjacent dune landscapes on Yanakie isthmus have also been added to the park. Access to a number of bays on the west coast of Wilsons Promontory is provided by a main road running into the park headquarters at Tidal River, and beyond this walking trails give access to outstanding natural coastal scenery, free from any kind of development. The persistence of sectors of coastal landscape, unmodified by man-made structures, can only be guaranteed in reserves of this kind, managed by an authority which gives first priority to the conservation of natural environments. If this primary aim is to be achieved the extent of facilities and constructions in national parks would have to be assessed, and as the number of people wishing to see and enjoy a national park such as Wilsons Promontory increases year by year, it may be necessary to concentrate on catering for day visitors, rather than providing more overnight accommodation within the Park boundaries.

The Port Campbell National Park covers a 20 mile sector of coast, with fine cliff scenery and coastal heathlands. Wingan Inlet and Mallacoota Inlet National Parks comprise estuarine lagoons with adjacent bushland, heath, and dune landscapes on the east Gippsland coast, and The Lakes National Park is a segment of barrier heathland and woodland on Sperm Whale Head, with a frontage of sandy beaches and salt marshes bordering the Gippsland Lakes. There is still a possibility of increasing the proportion of coast in national parks, especially in east Gippsland, where a small national park has been declared at Point Hicks (formerly Cape Everard).

The following list shows the area of coastal national parks:

	acres
Port Campbell National Park	1,750
Wilsons Promontory National Park	102,379
The Lakes National Park	5,288
Captain James Cook National Park	6,700
Wingan Inlet National Park	4,730
Mallacoota Inlet National Park	11,225

Wildlife reserves

Several of the reserves managed by the Fisheries and Wildlife Department on and near the coast are primarily game reserves for the conservation of waterfowl. These include Long Swamp in the far west, Lake Connewarre near Geelong, Jack Smith's Lake and Lake Reeve behind the Ninety Mile Beach, McLeod's Morass and Jones Bay in the Gippsland Lakes region, and Ewings Morass, with Lake Curlip, near the mouth of the Snowy River. These are wetland areas comprising lakes and lagoons with reedswamp and saltmarsh habitats, and each carries important breeding colonies of waterfowl, especially wild duck.

State faunal reserves on or near the coast include Lawrence Rocks, off Portland, with various sea birds including a gannet colony; Lady Julia Percy Island, a few miles to the east, a centre for sea birds and seals; Mud Islands in Port Phillip Bay, a sanctuary for storm-petrels and fairy terns; Quail Island and Chinaman Island, which are mangrove-fringed islands of salt marsh and woodland with varied wildlife in Western Port; Seal Rocks with its seal colony off Phillip Island; Cape Woolamai, a reserve with an important mutton-bird colony; and Nooramunga, comprising the sandy and swampy islands of Corner Inlet, with their rich and varied wildlife communities.

Research is an important function of the Fisheries and Wildlife Department, and ecological investigations are in progress on several of these reserves. Conservation of coastal plant communities has received less attention so far in Victoria, but many of the critical vegetation types are contained within national parks and wildlife reserves. One exception is the vegetation of the Cape Liptrap area, which has a variety of plant communities, some not represented elsewhere, not yet protected by wildlife reserve designation.

The following list shows the area of coastal wildlife reserves :

	acres
Long Swamp State Game Reserve	5,830
Lawrence Rocks State Faunal Reserve	20
Lady Julia Percy Island State Faunal Reserve	330
Lake Connewarre State Game Reserve	8,000
Mud Islands State Faunal Reserve	1,200
Quail Island State Faunal Reserve	2,000
Chinaman Island State Faunal Reserve	150
Seal Rocks State Faunal Reserve	7
Cape Woolamai State Faunal Reserve	320
Nooramunga State Faunal Reserve	24,600
Jack Smith's Lake State Game Reserve	2,609
Lake Reeve State Game Reserve	12,000
McLeod's Morass State Game Reserve	1,045
Jones Bay State Game Reserve	900
Ewings Morass State Game Reserve	10,980
Lake Curlip State Game Reserve	1,950

Some problems

Conservation of coastal landscapes and associated wildlife is a problem confronting not only sectors designated as national parks and wildlife reserves but also the management of coastal resources generally. Coastal landforms and biological communities are dynamic systems, subject to

natural evolution, and likely to change in response to man's activities in the coastal region. Thus cliffed coasts recede as the result of weathering processes and wave action, beaches are subject to alternations of cut-and-fill and to longshore drifting by wave and current action, and coasts fringed by mangrove swamps, salt marshes, or reedswamp tend to advance seaward, especially if sediment is being carried into them by rivers. Interference with any of these processes—whether by building sea walls, breakwaters and groynes, by dredging navigation channels, or by destroying the vegetation which fringes and protects the shore—can bring about unfavourable changes. The disappearance of sand from Hampton Beach and its accumulation nearby behind the breakwater built at Sandringham is one example; another is the onset of erosion on the shores of the Gippsland Lakes following the disappearance of protective reedswamp, largely as the result of salinity increase after the cutting of an artificial entrance at Lakes Entrance eighty years ago. Biological resources are particularly vulnerable to the effects of man's interference. The ecology of shores exposed at low tide can be modified even by a few holidaymakers turning over rocks in search of crabs, while the impact of skindiving and underwater fishing in nearshore waters has become very widespread along the Victorian coast in recent years. Pollution, whether from the land by way of rivers and drains, or from ships at sea, can adversely affect marine ecology, and imbalance can develop following overfishing or the large scale cropping of particular species, such as the scallops in Port Phillip Bay. Evidence that coastal landforms and biological features can be changed as the result, directly or indirectly, of man's activities shows their intimate connection with the utilisation and development of coastal resources. The possible consequences of any project affecting shore features, especially vegetation cover, need to be assessed by careful survey and detailed research beforehand, and measures taken to avoid damage to coastal resources.

The major port and industrial development planned in the Hastings area in the next few years is likely to modify the environment of Western Port. Surveys are being conducted by a number of government and university departments to record the present environment and assess the possible consequences of proposed developments. Up to now, much of the northern shore of Western Port has retained essentially the features and qualities of a natural environment: the State faunal reserves at Quail Island and Chinaman Island are intended to conserve samples of this landscape and its wildlife. Western Port is also important as a fishery and an area for waterborne recreation. The mangrove fringe, which protects much of the northern shore, is particularly vulnerable to pollution damage, and if it is destroyed shoreline erosion will ensue, consuming land and releasing sediment into tidal channels, including the channels that have to be maintained for navigation.

Development in Western Port can protect the original environment if the port and industrial activity are confined to a particular zone, and landscape amenity, recreational opportunity, and wildlife interest conserved over the rest of the area, as required by the statements of planning policy approved by the Government in 1971 for Western Port and Mornington Peninsula. The same concept is applicable to Port Phillip Bay, which plays a vital role as a recreational area for the people of Melbourne, Geelong, and the bayside townships.

Mining has not affected the Victorian coast to the extent experienced in other States, largely because coastal quarrying has been limited and there has not been disruption of beach and dune landscapes for mineral sand extraction. Experience in other States has shown that this kind of mining involves the destruction of vegetation and natural scenery, and generally results in erosion and mobilisation of dune sands. Active movement of unvegetated dunes, probably accentuated in the past by grazing and burning of their scrub and woodland cover, is already a problem on the coast behind Discovery Bay, on the Yanakie isthmus, and towards Cape Howe, as well as on a smaller scale at other localities. Attempts by the Soil Conservation Authority to halt the active dunes have shown that this is a laborious and expensive process; it is therefore important to preserve a vegetation cover on sectors where it still holds dune sands. Sectors of dune-fringed coast visited in summer by large numbers of holidaymakers (e.g., Lakes Entrance) also show actual or incipient erosion, and have had to be fenced and sown with such plants as marram grass as a prelude to the revival of a retentive vegetation cover, public access being confined to paved walkways. This is indicative of the kind of restriction that becomes necessary if intensive recreational use of the coast is to be reconciled with landscape conservation.

Subdivision of coastal land for holiday estate development proceeded on a large scale until it was restricted under the terms of an interim development order, pending the formulation and approval of planning schemes that will decide where such development should proceed. At present many of the subdivisions where coastal bushland has been cleared have only a few scattered buildings, often of poor quality in terms of amenity. Unrestricted development of holiday estates would eventually have led to the spread of a monotonous suburban coastal landscape at the expense of rural and natural coastal scenery. Suburban coast is already in existence along much of the eastern shore of Port Phillip Bay, and it is obvious here that this kind of development is inconsistent with the maintenance of variety in coastal landscapes. Zonation of coastal utilisation is a necessary element of planning schemes, some sectors developing as urban seaside resorts, others becoming primarily recreational, and others remaining essentially natural.

The central problem is one of access. Proposals have been made in recent years for the construction of roads along the coast in order to provide easy public access, but this leads merely to the spread of disturbance and damage to natural scenery and wildlife resources along the coastline, and makes for uniformity, instead of variety, in the coast environment. For better public access one solution advanced is the provision of feeder roads branching from inland highways to serve seaside resorts and sectors of particular interest and recreational value along the coast. In this way, utilisation and development could be arranged in such a way as to meet the demands of those who want to enjoy natural and unspoilt coastline as well as those who prefer recreational activities that require structural developments, such as boat ramps and marinas, surf clubs, car parks, and camping grounds, in the coastal region. Taken broadly, the aim of conservation on the coast is to provide a pattern of utilisation that will ensure the preservation of the finest natural scenery and most important wildlife resources at the same time as encouraging the development of recreational facilities for seaside holidaymaking on other specified coastal sectors. In

this way it should be possible to satisfy most of the demands that are made for development and conservation on the coast of Victoria.

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Rivers

Stream flows

Water is a limited resource and a major factor in the development of the State. Hence a knowledge of its water resources is essential to their optimum use. Tabular data giving the mean, maximum, and minimum flows at selected gauging stations are published periodically by the State Rivers and Water Supply Commission in their *River Gaugings*. The data in the table below have been extracted from the latest published volume containing records of 175 gauging stations to 1965.

An average value such as the mean annual flow is a useful relative single measure of magnitude, but variability is equally important. Another crude measure of such variability is given by the tabulated values of the maximum and minimum annual flows; however, the difference between these extremes, termed the "range", will increase with increasing length of record.

Catchment and lengths

Other characteristics relating to streams are the size of the catchment and the lengths of the rivers. Areas of gauged catchments are given in *River Gaugings*, and the lengths of 230 rivers are tabulated on pages 31 to 35 of the *Victorian Year Book* 1963.

Catchments may be regarded as the hydrologically effective part of a "basin", or the area from which there is "run-off" to the stream. Thus, the whole of any area may be subdivided into basins, but parts of some basins may be regarded as non-effective, being either too flat or the rainfall too small to contribute to normal stream flows. There is little or no contribution in the north-west of the State where the annual rainfall is less than 18 inches to 20 inches. Above this amount, roughly half the rainfall appears as stream flow.

Total flow

The current estimate of mean annual flow is 17 million acre ft each year, about half of which flows into the Murray; the other half flowing southward to the Victorian coast. The geographic distribution of flow is heavily weighted towards the eastern half where the total flow is about 14 million acre ft (with about 8 million acre ft in the north-east and 6 million acre ft in the south-east) and hence leaving 3 million acre ft in the western half.

The following table shows the main river basins of Victoria and flows of the main streams:

VICTORIA—SCHEDULE OF MAIN STREAM FLOWS

Div.	Basin	Stream	Site of gauging station	Catchment area (square miles)	Year gauged from	Annual flows in '000 acre ft			
						Mean	No. of years	Max.	Min.
IV. Murray-Darling Division	1	Murray	Jingellic	2,520	1890	1,933	76	4,978	549
		Mitta Mitta	Tallandoon	1,840	1935	1,063	30	2,613	316
			Tallangatta	2,000	1886	1,147	49	3,460	203
	2	Kiewa	Kiewa	450	1886	518	80	1,684	144
	3	Ovens	Wangaratta	2,250	1941	1,308	25	3,367	271
	4	Broken	Goorambat	740	1887	205	79	887	15.5
	5	Goulburn	Murchison	4,140	1882	1,795	84	6,139	516
	6	Campaspe	Elmore	1,240	1886	192	78	667	0.6
	7	Loddon	Laanecoorie	1,610	1891	205	75	660	8.9
	8	Avoca	Coonooer	1,000	1890	63	76	321	3.8
	15	Wimmera	Horsham	1,570	1889	104	77	479	0
II. South East Coast Division	22	Snowy	Jarrahrmond	5,000	1907	1,682	42	3,254	766
	23	Tambo	Bruthen	1,030	(a) 1906	179	29	575	50
	24	Mitchell	Glenaladale	1,530	1938	764	28	1,779	325
	25	Thomson	Cowwarr	420	1901	325	50	553	142
	25	Macalister	Glenmaggie	730	1919	477	47	1,277	181
	26	La Trobe	Rosedale	1,600	(b) 1901	777	51	2,634	362
	28	Bunyip	Bunyip	268	(c) 1908	124	47	246	56
	29	Yarra	Warrandyte	899	1892	685	48	1,215	265
	30	Maribyrnong	Keilor	500	(d) 1908	91	35	266	3
	31	Werribee	Melton	446	(e) 1917	68	49	259	5.3
	32	Moorabool	Batesford	430	(f) 1908	58	16	149	2.5
	33	Barwon	Winchelsea	370	(g) 1922	115	33	412	25
	35	Carlisle	Carlisle	30	(h) 1930	32	31	71	14.5
	36	Hopkins	Wickliffe	540	(i) 1921	28	34	103	1.4
	38	Glenelg	Balmoral	606	(j) 1889	117	60	439	2.5

Source : *River Gaugings to 1965*, State Rivers and Water Supply Commission.

Note	Years excluded in estimating mean	Note	Years excluded in estimating mean
(a)	1924-25 to 1937-38	(f)	1921-22 to 1945-46
(b)	1919-20 to 1936-37	(g)	1933-34 to 1943-44
(c)	1951-52	(h)	1943-44 to 1946-47
(d)	1933-34 to 1955-56	(i)	1933-34 to 1943-44
(e)	1952-53	(j)	1933-34 to 1938-39

Location of streams

The location of about 2,500 streams in Victoria may be obtained by referring to the *Alphabetical Index of Victorian Streams* compiled by the State Rivers and Water Supply Commission in 1960. Owing to the replication of names for some streams, there are over 2,900 names; these have been obtained by examining Department of Crown Lands and Survey and Commonwealth Military Forces maps, so as to include names which have appeared on them. There are, in addition, many unnamed streams, those with locally known names, and those named on other maps or plans. No attempt was made in the Index to suggest a preferred name; this is a function of the committee appointed under the *Survey Co-ordination Place Names Act 1965*.

Stream reserves

In 1881, under the then current Land Act, an Order in Council created permanent reserves along the banks of streams where they passed through Crown land. These are scheduled in the *Township and Parish Guide* reprinted by the Lands Department in 1955. This schedule indicates the

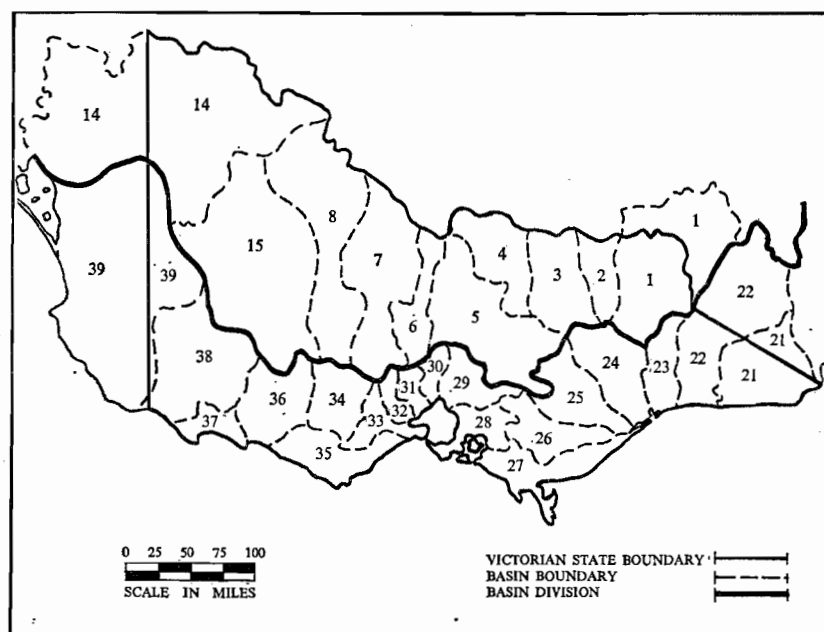


FIGURE 2. Relevant Basins of the two Divisions (South East Coast Division and Murray-Darling Division) which include Victoria and some adjacent areas. The Basins are numbered as shown on Map 3 (Sheet 2) in *Review of Australia's Water Resources*, published by Department of National Development, 1965.

SOUTH EAST COAST DIVISION

- | | |
|---------------------|-----------------------|
| 21. East Gippsland | 30. Maribyrnong River |
| 22. Snowy River | 31. Werribee River |
| 23. Tambo River | 32. Moorabool River |
| 24. Mitchell River | 33. Barwon River |
| 25. Thomson River | 34. Lake Corangamite |
| 26. La Trobe River | 35. Otway |
| 27. South Gippsland | 36. Hopkins River |
| 28. Bunyip River | 37. Portland |
| 29. Yarra River | 38. Glenelg River |
| | 39. Millicent Coast |

MURRAY-DARLING DIVISION

- | |
|------------------------|
| 1. Upper Murray River |
| 2. Kiewa River |
| 3. Ovens River |
| 4. Broken River |
| 5. Goulburn River |
| 6. Campaspe River |
| 7. Loddon River |
| 8. Avoca River |
| 14. Mallee |
| 15. Wimmera-Avon River |

location and width of reservations for 280 streams which (except for the Murray) are 1, 1½, or 2 chains wide on *each* bank of the stream. The areas thus reserved were not fully delineated until subsequently surveyed prior to alienation.

Further reference, 1963; Droughts, 1964

Floods

The natural history of unregulated rivers is largely the history of their floods and droughts. Rainfall intensity increases with decrease in latitude and consequently Victoria is less subject to floods than the northern States. The practical importance of floods is, however, largely related to the damage they do in occupied areas.

Flood damage usually occurs because of the occupation of flood plains, and once occupied there is a demand for protection which is commonly provided by levees. Such levees have been constructed along the major streams including the Murray, Snowy, and Goulburn, and also in urban areas occupying the flood plain of the Dandenong Creek. The objection to levees is that by restricting the flood plain, the flood level for a given discharge is increased, and if overtopping does occur, damage is more serious. Other flood mitigation measures used in Victoria, such as straightening the stream to increase the gradient and flow rate, have also been used on such streams as the Bunyip and the Yarra. Provision to prevent excessive scour may be necessary in some cases.

Lake level changes

Another form of flood damage that has occurred in the Western District is due to the increase in level of closed lakes flooding marginal land. This has been caused by a series of wet years since 1950 upsetting the normal balance between evaporation and inflow. In the decade since 1950 the winter rainfalls in the region of Lake Corangamite were 15 per cent above average, and the lake level rose 11 ft above its normal level of 380 ft to 391 ft to inundate about 20 square miles of adjacent land.

To reduce the inflow to this lake and hence the area flooded, a 28 mile channel, completed in 1959, diverts water to the Barwon River from the Cundare Pool. This pool, which was formed by building a low barrage across a shallow area at the head of the lake, acts as a temporary storage for the relatively fresh waters of the Woody Yaloak River which normally enter the lake.

The rate of diversion is governed by the level of the Cundare Pool and by the relative salinities of water in the pool and in the Barwon River. If the 60,000 acre ft diverted in 1960 had entered Lake Corangamite, the lake level would have been 9 inches above the maximum observed level. The level would have been almost as high again in late 1964—another very wet year—but for the diversion in the preceding five years of about 180,000 acre ft. These wet years have maintained the relatively high lake level.

Legislation has been passed to permit the Government to pay compensation on a special scale to landowners who may elect to surrender land up to 388 ft above sea level around Lake Corangamite, plus any higher land rendered inaccessible to the landowner by the initial surrender. The legislation also makes similar provision for the neighbouring Lakes Gnarpurt and Murdeduke.

Other floods

Owing to the tendency for major floods to overflow the banks and, in flat country, to pass down other channels which may not rejoin the main stream, it is often difficult to determine even the relative magnitude of major floods. The difficulty is magnified by the necessity for maintaining records of the level of the gauge in relation to a permanent datum, if a true comparison is to be made.

The year 1870 is regarded as the wettest that Victoria has experienced for over a century. As there were only thirteen rainfall stations whose records are available, the estimated average of 38 inches over the State is crude, but is 3 inches more than the next highest figure of 35 inches for

1956. River gauges in 1870 were practically restricted to the Murray, and consequently flood estimates on other streams are crude and can only be inferred from dubious evidence. Furthermore, subsequent to the 1870 floods, levees were constructed along the Goulburn and other streams and consequently heights of subsequent floods were augmented by the restrictions imposed.

In the north-east, floods occurred in the years 1906, 1916, 1917, and 1956. Although records of flood flows at gauging stations on the main streams have been published, such estimates are open to correction in the light of more recent evidence. Owing in part to under-estimation of earlier floods, the protection at the S.E.C. works at Yallourn was inadequate and the 1934 flood overflowed the banks of the La Trobe into the open cut at Yallourn. This flood was caused by a storm which is, on the basis of rainfall over large areas, the most severe that has been recorded within Victoria. An earlier storm of December 1893 which occurred over east Gippsland was heavier, but this also covered part of New South Wales.

Lakes

Lakes may be classified into two major groups: those without natural outlets which are called "closed" lakes and those with a natural overflow-channel which may be termed "open" lakes. For closed lakes to form, annual evaporation must exceed the rainfall: this is the case over most of Victoria.

Closed lakes occur mainly in the flat western part of the State. They fluctuate in capacity much more than open lakes and frequently become dry if the aridity is too high. Lake Tyrrell in the north-west is usually dry throughout the summer and can consequently be used for salt harvesting.

The level of water in an open lake is more stable because as the lake rises the outflow increases, thus "governing" the upper lake level and thus partially regulating streams emanating from it. This regulation enhances the economic value of the water resources of open lakes but Victoria does not possess any such large lake-regulated streams. However, there are small streams of this type in the Western District, such as Darlots Creek partly regulated by Lake Condah and Fiery Creek by Lake Bolac.

Salinity is often a factor which limits the use of lake water; even the use of freshwater lakes is not extensive in Victoria due to the cost of pumping. The average salinity of closed lakes covers a wide range depending upon the geological conditions of the catchments and the water level.

Lake Corangamite is Victoria's largest lake. It can be regarded as a closed lake although during the wet period in the late 1950s it rose to within 4 ft of overflowing. The total salt content is about 16 million tons, giving the lake a salinity somewhat higher than seawater under average water level conditions.

The Gippsland lakes are a group of shallow coastal lagoons in eastern Victoria, separated from the sea by broad sandy barriers bearing dune topography, and bordered on the ocean shore by the Ninety Mile Beach. A gap through the coastal dune barrier near Red Bluff, which was opened in 1899, provides an artificial entrance to the lakes from the sea. However, sea water entering this gap has increased the salinity of some lakes, which in turn has killed some of the bordering reed swamp and led to erosion. The Gippsland lakes have been of value for commercial fishing

and private angling and also attract many tourists. Coastal lagoons of this type rarely persist for more than a few thousand years and as deposition of sediment proceeds and bordering swamps encroach, the lakes will gradually be transformed into a coastal plain.

A number of Victorian lakes and swamps have been converted to reservoirs. Waranga Reservoir is an example of this, as are Fyans Lake, Batyo Catyo, and Lake Whitton in the Wimmera. A good example of lake utilisation is the Torrumbarry irrigation system on the riverine Murray Plains near Kerang in north-west Victoria.

Further reference, 1965 ; Natural Resources Conservation League, 1965

Survey and mapping

The Survey Branch of the Department of Crown Lands and Survey is responsible for the development of the National Geodetic Survey within Victoria, the preparation of topographic maps, the survey of Crown lands, and the co-ordination of surveys under provisions of the *Survey Co-ordination Act 1958*.

An Australia-wide primary geodetic survey was completed in 1966, and is continuously being improved and extended to provide a framework of accurately fixed points for the control of all other surveys and mapping. A State level network has also been completed, and will be based on a national mean sea level value, thus obviating the multitude of local datums currently in use.

As part of its mapping activity the Department provides an aerial photography service, and maintains an aerial photograph library where approximately one quarter of a million photographs are held, from which prints and enlargements may be obtained.

The official map of Victoria has been published in four sheets at a scale of 1 : 500,000 and shows highways, roads, railways, watercourses, towns, mountains, and other natural and physical features. A less detailed map of Victoria has also been published and is available in one sheet at a scale of 1 : 1,000,000.

Topographic maps at a scale of 1 : 250,000 covering the whole State have been published by the Royal Australian Survey Corps and the National Mapping Division. A joint State-Commonwealth mapping programme is now under way to produce a new series of topographic maps at a scale of 1 : 100,000 showing 20 metre contours, to replace the old 1 : 31,680 and 1 : 63,360 maps. A number of these maps have been published, and it is expected that the State will be covered by this series by 1975.

Large scale base maps have been prepared for rapidly developing areas throughout the State, including the outer metropolitan area, Mornington Peninsula, Ballarat, Geelong, Phillip Island, and a number of smaller towns. These maps were originally compiled at a scale of 1 : 4,800 with 5 ft contours, but because of the impending introduction of the metric system all new maps will be published at a scale of 1 : 5,000 showing 2 metre contours.

Smaller scale general purpose maps are required over areas covered by the large scale base maps, and another series of maps will be published at a scale of 1 : 25,000. The first maps of this series will cover Melbourne and environs. Concurrently with this work, the Division of National Mapping

is compiling a series of maps over urban areas at a scale of 1 : 10,000 for census purposes. The Mines Department and the Forests Commission also contribute to State mapping by publishing maps for geological and forestry purposes.

In addition to geodetic surveys, cadastral surveys are carried out by the Department for the purpose of defining boundaries and for determining dimensions and areas of allotments for the subsequent issue of Crown grants. This information forms the basis for the compilation of county, parish, and township plans which are published at various scales and show details of the original subdivision of Crown lands.

Recently investigations have been made with the object of introducing a fully integrated topographic-cadastral mapping system at scales ranging from 1 : 500 to 1 : 100,000. This action has been prompted by the introduction of the metric system and the need for standardisation of map scales.

Complete information of survey and mapping activities may be obtained from the Central Plan Office, 2 Treasury Place, Melbourne, where maps, plans, and aerial photographs are available for purchase by the public.

CLIMATE

Victoria

Victoria experiences a wide range of climatic conditions ranging from the hot summer of the Mallee to the winter blizzards of the snow covered Alps, and from the relatively dry wheat belt to the wet eastern elevated areas where many of Victoria's permanent streams spring.

Circulation patterns affecting Victoria

The predominating pattern which affects Victoria is an irregular succession of depressions and anticyclones. Although these systems generally move from west to east, this is not always the case. Systems can develop or degenerate *in situ*. Their speed of movement can vary considerably. They can remain quasi-stationary for even a week or more at a time.

The mean tracks of the depressions and anticyclones show a marked annual variation across the Australian region. In winter, due to the cold continent, anticyclones are centred over inland Australia, and a series of depressions over southern waters provide a persistent zonal flow across southern parts of the continent. However, on occasions when an anticyclone develops a ridge to southern waters and a depression intensifies east of Tasmania, a "cold outbreak" occurs. This brings cold and relatively dry air from southern waters rapidly across Victoria, giving windy, showery weather with some hail and snow. On other occasions, when an anticyclone moves slowly over Victoria, a prolonged spell of fine weather with frost and fog results.

During the spring the average track of depressions and anticyclones shifts further south until in summer the average position for anticyclones is south of the continent. At this time of the year the troposphere is warmer, and therefore can hold more moisture. For this reason, rainfall during the summer months tends to be heavier. However, lifting agents in the form of cold fronts are weaker and are not as frequent as the succession of fronts that pass in winter and spring, and so rain days are less frequent in summer.

Heat wave conditions, which usually last between two and three days, and occasionally longer, are not infrequent in summer when a large anticyclone remains quasi-stationary over the Tasman Sea. Dry air from the hot interior of the continent is brought over south-eastern Australia, and hot gusty northerly winds strengthen with the approach of a southerly change. These changes vary in intensity and while some are dry, others may produce rain and thunderstorms.

During the autumn, the mean track of the anticyclones moves northwards and extremes of temperature become less frequent as the season progresses.

The circulation pattern at the surface does not always bear the same relation to the weather which occurs. Rainfall may be produced by a depression in the upper atmosphere without any indication at the surface. One of the greatest State-wide rain producing systems is a weak surface depression, centred over the State and extending upwards in the atmosphere to 20,000 ft and more. On occasions, the surface depression is not a closed system, but a trough extending south from northern Australia. These are more common in the summer months and when preceded by an extensive flow of moist humid air over Victoria from the Tasman Sea, very heavy rainfall can result.

The heaviest rainfall in east Gippsland is produced by intense depressions to the east of Bass Strait. These may have come from the west and intensified in this area, or alternatively may have developed to the east of New South Wales or further north, and moved southwards along the coast.

The distribution of the average annual rainfall in Victoria is shown in the map on page 53.

Rainfall

Rainfall exhibits a wide variation across the State and although not markedly seasonal, most parts receive a slight maximum in the winter or spring months. The relatively dry summer season is a period of evaporation, which greatly reduces the effectiveness of the rainfall. Average annual totals range between 10 inches for the driest parts of the Mallee to over 60 inches for parts of the North-Eastern Highlands. An annual total exceeding 140 inches has been reported from Falls Creek in the north-east; however, with the sparse population and inaccessibility of the highland localities, it is not practicable to obtain a representative set of observations from this area. Most areas south of the Divide receive an annual rainfall above 25 inches, with over 40 inches on the Central Highlands, Otway Ranges, and southern Gippsland. The wheat belt receives chiefly between 12 and 20 inches. With the exception of Gippsland, 60 to 65 per cent of the rain falls during the period May to October. This proportion decreases towards the east, until over Gippsland the distribution is fairly uniform with a warm season maximum in the far east. All parts of the State have on rare occasions been subjected to intense falls, and monthly totals exceeding three times the average have been recorded. Monthly totals exceeding 10 inches have been recorded rarely at most places on and south of the Divide, the chief exception being over the lowlands extending from Melbourne to the Central Western District. Occurrences are more frequent, but still unusual, over the north-east and East Gippsland and isolated parts

such as the Otways. This event has rarely been recorded over the north-west of the State. The highest monthly total ever recorded in the State was a fall of 35.09 inches at Tanybryn in the Otway district in June 1952.

An estimate of the area distribution of average annual rainfall, and the actual distribution of rainfall in Victoria as shown by area for 1966 to 1970 are shown in the following table :

VICTORIA—DISTRIBUTION OF AVERAGE AND ANNUAL RAINFALL

Rainfall (inches)	Area ('000 square miles) (a)					
	Average	1966	1967	1968	1969	1970
Under 10	..	1.7	32.1	1.5	..	0.1
10-15	19.7	19.2	21.7	8.8	8.9	9.9
15-20	13.4	10.1	13.7	16.6	26.1	17.6
20-25	15.7	11.3	8.3	17.1	13.4	8.8
25-30	15.8	13.6	7.0	15.9	10.0	11.9
30-40	14.2	9.4	4.7	14.8	17.7	16.2
Over 40	9.1	22.6	0.4	13.2	11.8	23.4

(a) Total area of the State is 87,884 square miles.

The average annual number of wet days (0.01 inches or more in 24 hours) is over 150 on the west coast and west Gippsland, and exceeds 200 over the Otway Ranges. The average number of wet days a year is reduced to 100 at a distance of approximately one hundred miles inland from the coast.

District rainfall

Mallee and Northern Country

These districts receive very little rain from western cold fronts, and rain is usually brought by depressions moving inland, "upper lows", and thunderstorms. The amount received is highly variable from year to year. The average rainfall is fairly even through the year, except near the northern edge of the ranges where more rain falls in winter than in summer.

Wimmera

Rainfall in this district is more reliable than further to the north, as cold fronts bring showers, particularly in winter. The average rainfall shows a slight maximum in the winter months. This district includes part of the Grampians, which receive much higher rainfall than the plains.

Western and Central Districts

Rain may fall in these districts in a variety of situations and they have the most reliable rainfall in the State. Most rain comes with the westerly winds and cold fronts which predominate in winter and the average rainfall shows a winter maximum which is most marked along the west coast. The heaviest rain falls on the Otways, the Dandenongs, and the Upper Yarra Valley, while the plain to the west and south-west of Melbourne has relatively low rainfall due to the "rain shadow" of the Otway Ranges.

North Central

Most of this district consists of elevated country surrounding the Dividing Range and rainfall is heaviest on the higher parts, particularly

towards the east. There is a well marked winter maximum in the yearly rainfall distribution.

North-eastern

The greater part of this district consists of ranges, some mountains being 6,000 ft in elevation, and rainfall on this higher country is generally heavy. The higher peaks lie under snow cover for most of the winter. A marked rain shadow area is evident near Omeo, which receives only half as much rain as the highlands to the north-west or north-east.

West Gippsland

The western part of this district has a very similar rainfall régime to the Western and Central Districts. The heaviest rain falls on the ranges of the Divide and the south Gippsland hills. Towards the east, however, a "rain shadow" is evident in the Sale-Maffra area. This eastern section receives some of its rain from east coast depressions.

East Gippsland

Depressions off the east coast bring most rain to this district, and such rainfall can be very heavy. The average rainfall shows a summer maximum. Fronts moving in a westerly stream bring very little rain, and with north-westerly winds in winter, the coastal section has the mildest weather in the State. Rain shadows are evident along the valleys of the Mitchell, Tambo, and Snowy Rivers while the heaviest rain falls on the surrounding highlands.

A description of the State's agricultural districts will be found on pages 274-9.

VICTORIA—RAINFALL IN DISTRICTS

(inches)

Year	Districts							
	Mallee	Wimmera	Northern	North Central	North-eastern	Western	Central	Gippsland
1961	13.44	15.07	14.90	25.27	27.60	24.03	22.90	33.04
1962	11.29	17.69	18.85	27.77	33.78	25.99	26.07	31.41
1963	16.15	18.55	20.66	30.46	35.49	25.87	28.36	35.61
1964	16.14	25.02	20.93	34.40	40.27	38.69	35.40	37.99
1965	11.76	15.25	15.36	25.83	25.80	24.67	25.09	26.28
1966	12.48	16.47	20.28	31.97	41.26	29.35	32.08	38.97
1967	5.10	8.71	9.46	16.06	17.62	16.43	17.09	23.33
1968	13.68	19.68	20.93	34.66	39.51	33.54	28.84	34.04
1969	16.05	17.45	18.94	27.17	34.56	26.72	26.13	36.01
1970	14.44	18.64	20.29	33.20	39.10	33.72	36.87	44.16
Average (a)	12.87	17.94	18.45	27.91	34.12	28.45	29.25	33.94

(a) Average for 58 years 1913 to 1970.

Rainfall reliability

It is not possible to give a complete description of rainfall at a place or in a district by using a single measurement. The common practice of quoting the annual average rainfall alone is quite inadequate in that it does not convey any idea of the extent of the variability likely to be

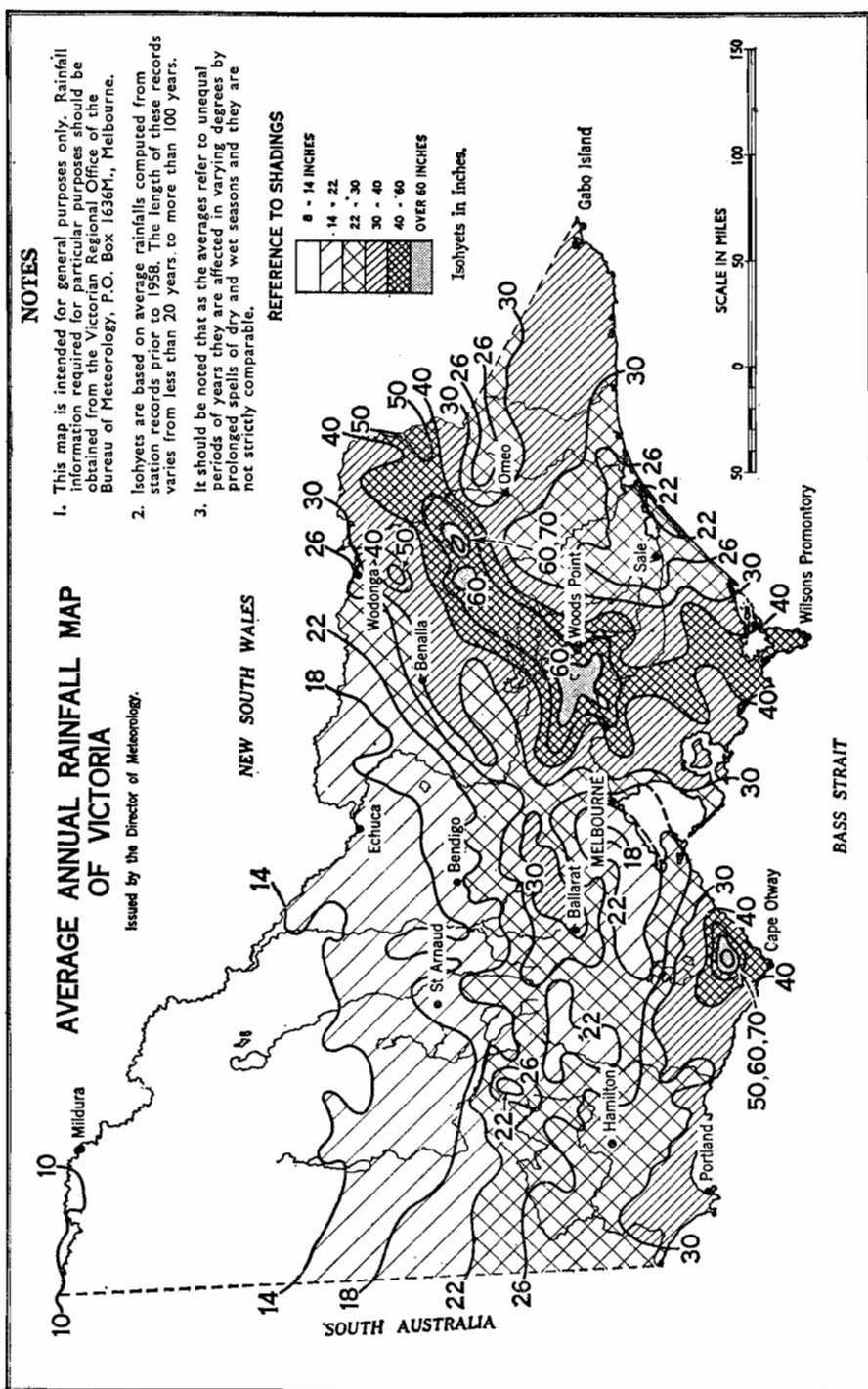


FIGURE 3.

VICTORIA—DISTRICT MONTHLY RAINFALL: AVERAGE AND 1970

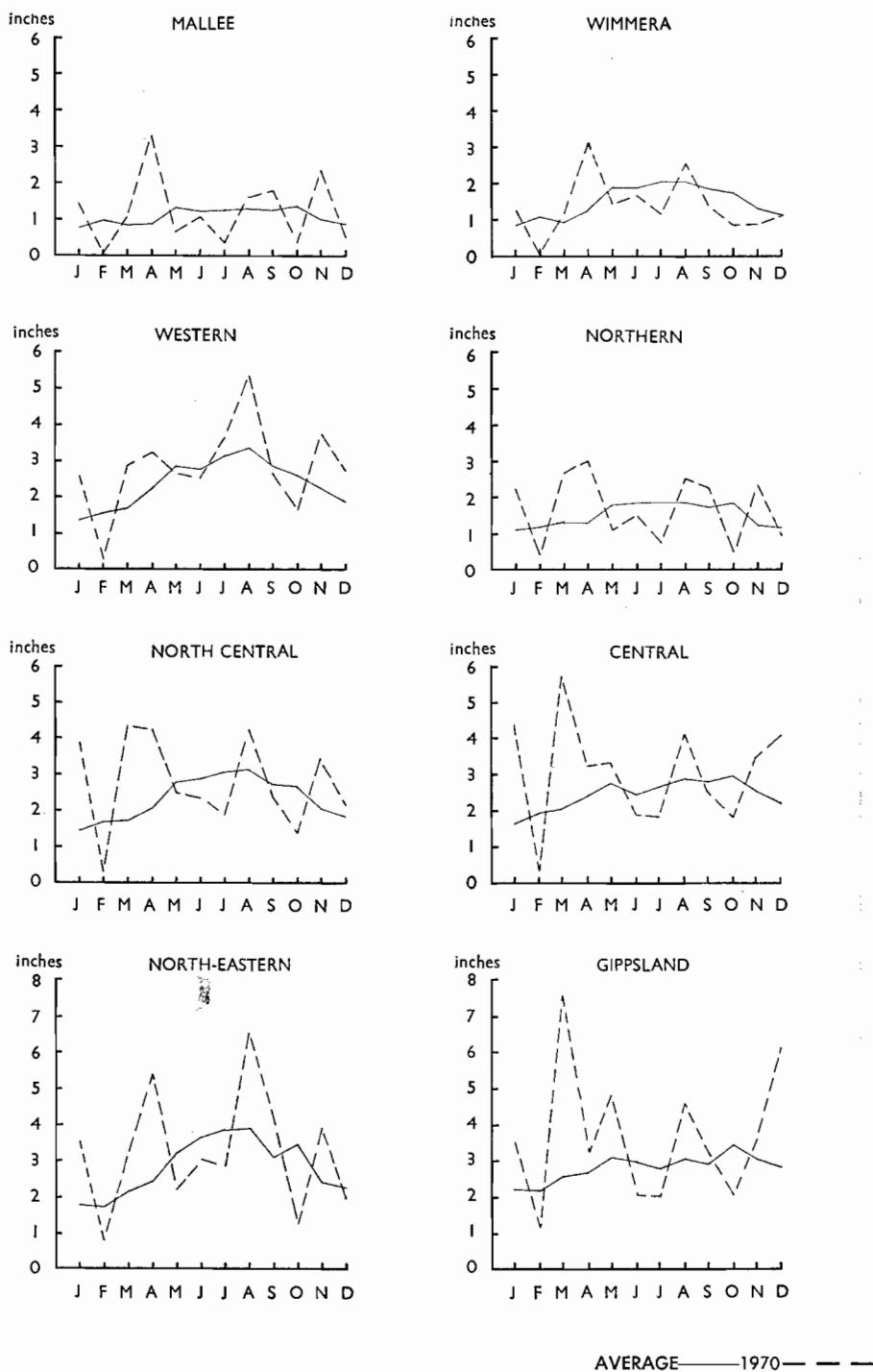


FIGURE 4.

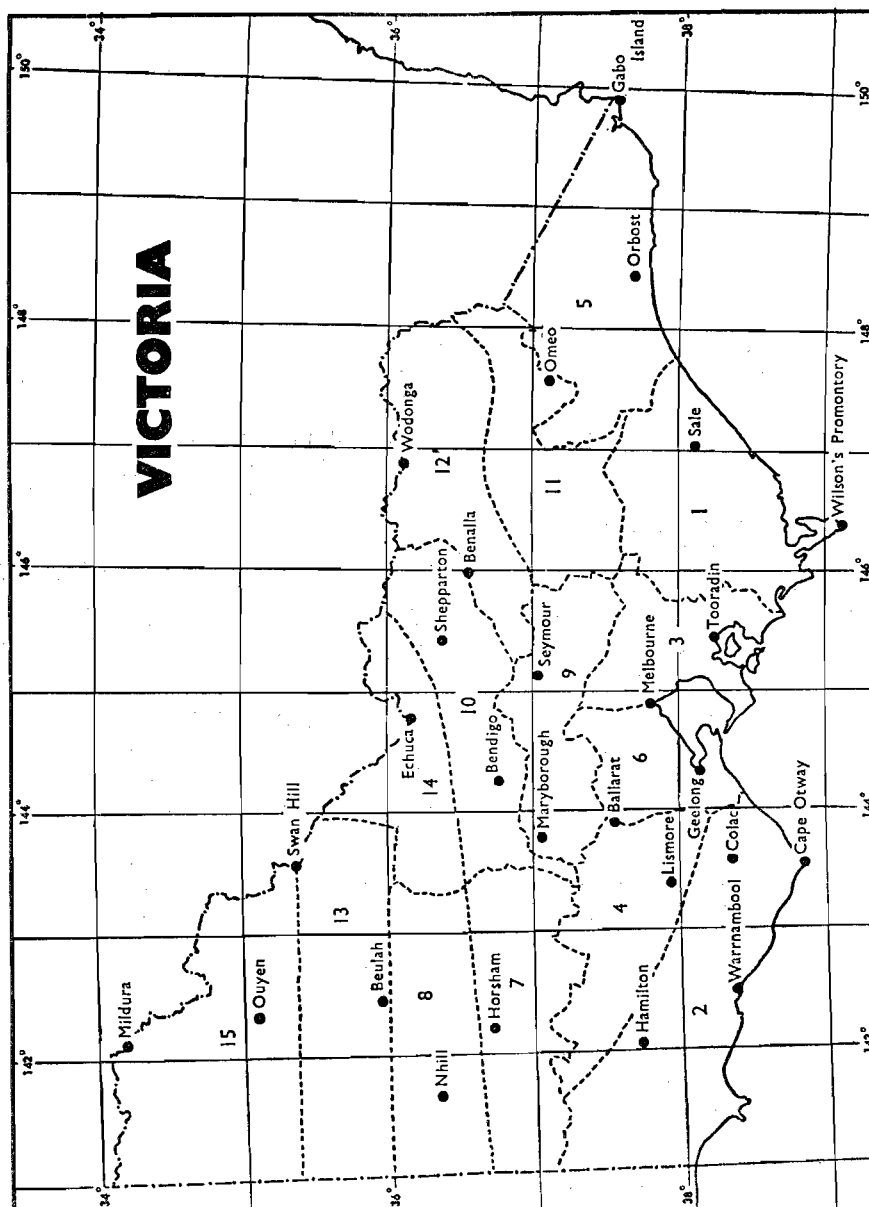


FIGURE 5. Relative rainfall variability districts. Names of districts are shown in the table on page 56.

encountered. Examination of rainfall figures over a period of years for any particular place indicates a wide variation from the average; in fact, it is rare for any station to record the average rainfall in any particular year. Thus for a more complete picture of annual rainfall the variability or deviation from the average should be considered in conjunction with the average.

Rainfall variability assumes major importance in some agricultural areas. Even though the average rainfall may suggest a reasonable margin of safety for the growing of certain crops, this figure may be based on a few years of heavy rainfall combined with a larger number of years having rainfall below minimum requirements. Variability of rainfall is also important for water storage design, as a large number of relatively dry years would not be completely compensated by a few exceptionally wet years when surplus water could not be stored.

Although variability would give some indication of expected departures from normal over a number of years, variability cannot be presented as simply as average rainfall.

Several expressions may be used to measure variability, each of which may have a different magnitude. The simplest measure of variability is the range, i.e., the difference between the highest and lowest annual amounts recorded in a series of years. Annual rainfall in Victoria is assumed to have a "normal" statistical distribution. These distributions can be described fully by the average and the standard deviation. To compare one distribution with the other, the coefficient of variation

$\left(\frac{\text{standard deviation}}{\text{the average}} \times 100 \right)$ has been used. The coefficient of variation has been calculated for the fifteen climatic regions of Victoria (see Figure 5) for the 58 years 1913 to 1970 and the results are tabulated below in order of rainfall reliability :

VICTORIA—ANNUAL RAINFALL VARIATION

District	Average annual rainfall (a)	Standard deviation	Coefficient of variation
	inches	inches	per cent
1. West Gippsland	36.11	5.71	15.8
2. West Coast	30.33	4.96	16.4
3. East Central	35.12	5.82	16.6
4. Western Plains	24.80	4.41	17.8
5. East Gippsland	30.43	5.58	18.3
6. West Central	23.85	4.68	19.6
7. Wimmera South	19.37	3.86	19.9
8. Wimmera North	16.14	3.35	20.8
9. North Central	27.91	6.08	21.8
10. Upper North	19.99	4.68	23.4
11. Upper North-east	43.66	10.43	23.9
12. Lower North-east	30.33	7.28	24.0
13. Mallee South	13.62	3.48	25.6
14. Lower North	16.81	4.57	27.2
15. Mallee North	11.81	3.41	28.9

(a) Average for 58 years 1913 to 1970.

The higher the value of the coefficient of variation of the rainfall of a district, the greater the departure from the average and hence the more unreliable the rainfall.

Droughts

The variability of annual rainfall is closely associated with the incidence of drought. Droughts are rare over areas of low rainfall variability and more common in areas where this index is high.

Since records have been taken, there have been numerous dry spells in various parts of Victoria, most of them of little consequence but many widespread and long enough to be classified as droughts. The severity of major droughts or dry spells is much lower in Gippsland and the Western District than in northern Victoria.

The earliest references to drought in Victoria appear to date from 1865 when a major drought occurred in northern Victoria, and predominantly dry conditions prevailed in the Central District. Another dry spell of lesser intensity occurred in 1868.

The most severe and widespread drought recorded since white settlement in Australia occurred in the period 1897 to 1902. Victoria was most affected in the south in 1897-98 and in the north particularly in 1902.

The next major drought commenced about June 1913 and continued until April 1915 in the north and west and until August 1916 in Gippsland. The worst period was from May to October 1914.

The period from 1937 to 1945 was marked by three major droughts. The first commenced in February 1937 and continued with a break in the succeeding spring and summer until January 1939, the effects being felt much more severely in northern districts than elsewhere. Good rains in 1939 were followed by another dry period from December 1939 to December 1940. The third drought of the period extended from 1943 to 1945 in which the worst period was from June to October 1944. The drought from 1967 to 1968 is described on pages 53 and 67 of the *Victorian Year Book* 1969 and other effects noted on pages 309-12 of the *Victorian Year Book* 1970.

Droughts of shorter duration and lower intensity occurred in 1877, 1888, in 1907-08 in Gippsland, and in the 1920s, particularly 1925, 1927, and 1929.

Readers are referred to the publication *Droughts in Australia*, Bulletin No. 43 of the Commonwealth Bureau of Meteorology, published in 1957, for a definitive treatment of the subject of droughts in Victoria.

1967-68 drought, 1969

Floods

Floods have occurred in all districts, but they are more frequent in the wetter parts of the State such as the north-east and Gippsland. However, although a rarer event over the north-west lowlands, they may result from less intense rainfall and continue longer because of the poor drainage in this section of the State. In many instances the frequency of flooding is increased by valley contours and damage is often greater because of the higher density of adjacent property and crops. (See also pages 45-7 and 62-3.)

Snow

Snow in Victoria is confined usually to the Great Dividing Range and the alpine massif, which at intervals during the winter and early spring months may be covered to a considerable extent, especially over the more elevated eastern section. Falls elsewhere are usually light and infrequent. Snow has been recorded in all districts except the Mallee,

VICTORIA—MEANS OF CLIMATIC ELEMENTS : SELECTED VICTORIAN TOWNS

Locality	Legend (a)	Years of record	January	February	March	April	May	June	July	August	September	October	November	December	Annual
Mildura MALLEE	{ 1	23	68	93	98	55	123	93	107	105	103	120	97	81	1,143
	{ 2	23	90.1	87.5	82.8	73.8	65.5	60.8	59.2	62.6	68.4	74.6	80.6	85.3	74.3
	{ 3	23	62.0	61.1	56.9	50.0	45.3	41.6	39.8	41.4	45.1	49.8	53.6	58.1	50.4
Swan Hill	{ 1	85	75	88	89	93	134	144	123	132	121	135	97	96	1,327
	{ 2	69	88.7	87.9	82.1	73.0	64.8	58.6	57.7	61.2	66.8	73.2	80.3	85.7	73.3
	{ 3	63	59.6	59.7	55.2	49.2	44.3	40.6	39.3	40.7	43.9	48.1	52.8	57.0	49.2
Horsham WIMMERA	{ 1	96	82	103	98	128	184	201	179	188	177	169	129	114	1,752
	{ 2	61	85.7	85.7	79.8	70.5	62.7	57.0	55.9	58.9	64.0	69.9	76.9	82.0	70.8
	{ 3	62	56.0	56.3	52.5	47.4	43.3	40.3	39.0	40.3	42.2	45.5	49.8	53.4	47.2
Nhill	{ 1	83	79	92	87	116	162	190	179	185	170	158	115	111	1,644
	{ 2	64	85.3	84.6	79.5	70.5	63.0	57.5	56.4	59.1	64.3	70.0	76.9	82.1	70.8
	{ 3	65	55.1	55.4	51.7	46.8	43.0	39.8	38.1	39.3	41.7	44.9	48.8	52.9	46.4
Ballarat	{ 1	59	136	189	181	218	266	249	279	300	290	266	220	210	2,804
	{ 2	60	77.0	76.5	71.5	63.1	55.9	51.0	49.8	52.4	57.0	62.0	67.2	72.1	63.0
	{ 3	59	51.1	52.8	49.9	45.5	42.5	39.5	38.1	39.0	41.0	43.5	45.9	49.0	44.8
Hamilton	{ 1	99	127	128	165	214	269	290	289	301	286	257	199	181	2,706
	{ 2	83	78.1	77.9	73.2	65.6	59.2	54.8	53.5	55.6	59.6	63.7	69.0	73.8	65.4
	{ 3	83	52.3	53.4	50.9	47.3	44.3	41.3	40.0	40.9	42.8	44.8	47.1	50.0	46.3
Warrnambool	{ 1	72	124	139	183	227	299	292	330	316	276	247	205	174	2,812
	{ 2	66	71.5	71.6	69.7	65.1	60.5	56.8	55.7	57.1	59.8	62.9	65.8	68.7	63.8
	{ 3	66	54.8	55.7	53.8	50.5	47.4	44.3	43.0	43.9	45.7	47.9	50.0	52.7	49.1
Bendigo	{ 1	108	124	131	143	154	211	241	219	219	208	202	145	129	2,126
	{ 2	103	85.1	84.3	78.7	69.6	61.1	55.2	53.8	56.9	62.2	68.6	75.5	81.2	69.4
	{ 3	101	57.3	57.8	54.2	48.4	43.7	40.7	38.9	40.1	43.0	46.7	50.7	54.5	48.0
Echuca	{ 1	91	97	106	129	130	164	178	160	165	153	169	118	112	1,681
	{ 2	87	87.6	86.8	80.9	71.7	63.2	57.4	55.9	59.2	64.8	71.7	78.8	84.2	71.8
	{ 3	86	59.5	59.5	55.5	49.1	44.0	40.9	39.4	40.9	43.8	48.1	52.4	56.7	49.2

NORTH CENTRAL	Alexandra	1	158	144	200	203	252	287	284	292	261	277	221	192	2,771
		2	48	84.8	78.8	68.9	60.6	53.7	53.1	56.9	62.7	68.5	74.8	81.2	69.0
		3	48	52.1	53.1	48.9	39.7	37.1	36.5	37.3	39.8	42.9	46.4	49.8	43.9
CENTRAL	Kyneton	1	148	155	182	215	294	355	324	328	290	273	204	197	2,965
		2	71	81.1	80.3	74.6	57.1	51.2	49.9	52.9	58.9	64.6	71.4	77.0	65.3
		3	65	49.6	50.3	47.2	38.4	36.1	34.8	35.5	37.9	40.6	44.0	47.5	42.0
CENTRAL	Geelong	1	118	147	160	177	196	192	179	188	202	203	186	157	2,105
		2	60	77.1	76.9	73.8	61.8	57.3	56.4	58.7	62.4	66.7	70.5	73.8	66.9
		3	61	55.6	56.8	54.5	46.5	43.2	41.6	42.5	44.6	47.3	50.2	53.4	48.9
CENTRAL	Mornington	1	168	160	190	243	276	280	279	275	281	275	232	203	2,862
		2	37	76.7	76.6	73.5	60.9	56.1	54.8	56.6	60.5	64.4	68.5	73.1	65.7
		3	35	55.6	56.6	54.9	48.2	44.9	43.3	44.1	46.3	49.0	51.3	53.7	49.9
NORTH-EASTERN	Omeo	1	197	208	212	181	206	226	208	213	243	283	238	246	2,661
		2	86	79.3	78.5	73.6	57.5	51.4	50.2	53.8	59.5	65.3	71.3	76.1	65.2
		3	85	48.8	49.2	46.1	35.9	33.7	31.8	33.1	36.8	40.2	43.6	46.9	40.6
NORTH-EASTERN	Wangaratta	1	138	150	184	185	223	288	254	249	231	247	180	169	2,498
		2	67	87.8	87.1	81.1	63.2	56.5	54.8	58.0	63.7	69.9	77.7	83.9	71.3
		3	66	58.9	58.6	53.8	41.7	39.0	37.9	39.4	42.5	46.7	51.4	56.0	47.8
WEST GIPPSLAND	Yallourn	1	175	239	208	246	388	329	325	390	349	343	331	275	3,598
		2	20	76.9	75.3	72.6	58.1	54.5	53.1	55.3	59.5	63.7	67.3	71.5	64.4
		3	20	54.5	55.7	53.8	45.5	42.8	40.5	41.7	43.8	47.0	49.0	51.9	47.9
WEST GIPPSLAND	Sale	1	173	180	214	185	239	195	164	206	197	274	258	231	2,516
		2	24	77.3	76.5	73.6	61.3	57.0	56.0	58.2	62.0	65.8	69.3	73.0	66.5
		3	24	54.2	55.4	52.5	43.3	40.0	38.3	39.6	41.9	45.8	48.4	51.9	46.6
WEST GIPPSLAND	Bairnsdale	1	240	198	252	201	205	219	199	188	223	273	248	265	2,711
		2	63	76.3	76.4	73.5	62.6	57.8	56.9	59.4	63.4	67.2	70.9	74.1	67.3
		3	62	54.0	54.7	47.3	42.8	39.7	38.3	39.6	42.7	46.0	49.0	52.1	46.5
EAST GIPPSLAND	Orbost	1	269	235	266	283	282	326	265	232	269	311	264	300	3,302
		2	29	77.1	76.9	74.5	63.2	58.8	58.0	60.0	63.5	67.0	70.2	74.1	67.7
		3	27	54.7	55.8	53.2	44.1	41.1	39.2	40.2	42.6	46.5	49.6	52.6	47.3

(a) Legend : 1. Average monthly rainfall in points : 100 points = 1 inch. (For all years of record to 1969.)
 2. Average daily maximum temperature (°F.) (For all years of record to 1969.)
 3. Average daily minimum temperature (°F.) (For all years of record to 1969.)

Wimmera, and northern country. The heaviest falls in Victoria are confined to sparsely populated areas and hence general community disorganisation is kept to a minimum. Snow has been recorded in all months on the higher Alps, but the main falls occur during the winter. The average duration of the snow season in the alpine area is from three to five months.

Temperatures

February is the hottest month of the year while January is only slightly cooler. Average maximum temperatures are under 75° F. along the coast and over elevated areas forming the Central Divide and North-Eastern Highlands. Apart from these latter areas, there is a steady increase towards the north, until, in the extreme north, an average of 90° F. is reached. Values decrease steadily with height, being under 70° F. in alpine areas above 3,000 ft and as low as 60° F. in the very highest localities.

Temperatures fall rapidly during the autumn months and then more slowly with the onset of winter. Average maximum temperatures are lowest in July; the distribution during this month again shows lowest values over elevated areas, but otherwise there is practically no variation across the State. Day temperatures along the coast average about 55° F. in July; much the same value is recorded over the wheat belt, and only a few degrees higher in the far north-west under conditions of few clouds and relatively high winter sunshine. The Alps experience blizzard conditions every year with minimum temperatures 10° F. to 20° F. less than at lowland stations.

In summer high temperatures may be experienced throughout the State except over the alpine area. Most inland places have recorded maxima over 110° F. with an all time extreme for the State of 123.5° F. at Mildura on 6 January 1906. Usually such days are the culmination of a period during which temperatures gradually rise, and relief comes sharply in the form of a cool change when the temperature may fall as much as 30° F. in an hour. However, such relief does not always arrive so soon and periods of two or three days or even longer have been experienced when the maximum temperature exceeds 100° F. On rare occasions extreme heat may continue for as long as a week with little relief.

Night temperatures, as gauged by the average minimum temperature, are, like the maximum, highest in February. Values are below 50° F. over the elevated areas, but otherwise the range is chiefly 55° F. to 60° F. The highest night temperatures are recorded in the far north and along the coast. In mid-winter average July minima exceed 40° F. along the coast and at two or three places in the far north. The coldest point of the State is the north-east alpine section, where temperatures frequently fall below freezing point. Although three or four stations have been set up at different times in this area, none has a very long or satisfactory record. The lowest temperature on record so far is 9° F. at Hotham Heights (station height 5,776 ft) at an exposed location near a mountain. However, a minimum of minus 8° F. has been recorded at Charlotte Pass (station height 6,035 ft)—a high valley near Mt Kosciusko in New South Wales—and it is reasonable to expect that similar locations in Victoria would

experience sub-zero temperatures (i.e., below 0° F.), although none has been recorded due to lack of observing stations.

Frosts

Frosts may occur at any time of the year over the ranges of Victoria, whereas, along the exposed coasts, frosts are rare and severe frosts (air temperature 32° F. or less) do not occur. Frost, however, can be a very localised phenomenon, dependent on local topography. Hollows may experience frost while the surrounding area is free of frost.

The average frost-free period is less than 50 days over the higher ranges of the north-east while it exceeds 200 days within 50 miles of the coast and north of the Divide. The average number of severe frosts (air temperature 32° F. or less) exceeds 20 per year over the ranges. The average number of light frosts (air temperature between 32° F. and 36° F.) varies from less than 10 per year near the coast to 50 per year in the highlands of the north-east.

The first frosts of the season may be expected in April in most of the Mallee and northern country and in March in the Wimmera. Over the highlands of the north-east, frosts may be severe from March to November. Severe frosts on the northern side of the Divide are twice as frequent as on the southern side at the same elevation.

Humidity

Generally, humidity in the lower atmosphere is much less over Victoria than in other eastern States. This is because the extreme south-east of the continent is mostly beyond the reach of tropical and sub-tropical air masses. For several periods in the summer, however, air from the Tasman Sea has a trajectory over Bass Strait and other parts of the State, and it is then that the moisture content rises to show wet bulb temperatures above 65° F. The incidence of high humidity is important to the vine and fruit industry, tobacco growers, and wheat farmers.

Evaporation

Since 1967 the Class A Pan has been the standard evaporimeter used by the Bureau of Meteorology. This type is being progressively installed at evaporation recording stations in Victoria; there were thirty-four at the end of 1970.

Measurements of evaporation have been made with the Australian tank at about thirty stations, about half of which are owned by the Bureau of Meteorology. Results from these stations show that evaporation exceeds the average annual rainfall in inland areas, especially in the north and north-west, by about 40 inches. In all the highland areas and the Western District the discrepancy is much less marked, and in the Central District and the lowlands of east Gippsland annual evaporation exceeds annual rainfall by 8 to 15 inches. Evaporation is greatest in the summer months in all districts. In the three winter months rainfall exceeds evaporation in many parts of Victoria, but not in the north and north-west.

Winds

The predominant wind stream over Victoria is of a general westerly origin, although it may arrive over the State from the north-west or south-west. There are wide variations from this general description, however,

and many northerlies and southerlies occur. The latter is the prevailing direction from November to February with a moderate percentage of northerlies often associated with high temperatures. Easterly winds are least frequent over Victoria, but under special conditions can be associated with some of the worst weather experienced over the State. Wind varies from day to night, from season to season, and from place to place. Examples of the diurnal variation are the sea breeze, which brings relief on many hot days along the coastline, and the valley or katabatic breeze, which brings cold air down valleys during the night. The latter is well developed in many hilly areas of Victoria, being the result of differential cooling after sunset. It springs up during the night, often suddenly, and continues after sunrise until the land surfaces are sufficiently heated again. The sensitive equipment required to measure extreme wind gusts has been installed at only about five or six places in the State and to date the highest value recorded is just slightly over 102 mph at Point Henry near Geelong in 1962. There is no doubt, however, that similar gusts have been experienced in other parts of the State, although not in the vicinity of a recording anemometer. It is considered that any place in Victoria could feasibly experience at some time a local gust of 100 mph or more.

Thunderstorms

Thunderstorms occur far less frequently in Victoria and Tasmania than in the other two eastern States. They occur mainly in the summer months when there is adequate surface heating to provide energy for convection. Between ten and twenty a year occur in most of Victoria, but the annual average is about thirty in the north-eastern ranges. Isolated severe wind squalls and tornadoes sometimes occur in conjunction with thunderstorm conditions, but these destructive phenomena are comparatively rare. Hailstorms affect small areas in the summer months ; and showers of small hail are not uncommon during cold outbreaks in the winter and spring.

Hydrometeorology

Floods in Australia cost millions of dollars a year in loss of production and wages, damage to property, loss of stock and crops, and sometimes even loss of life. Eastern Australia suffers the severest floods because of the greater number of large river systems and the many swift flowing streams draining from the chain of highlands extending almost without a break parallel to the coastline.

The Commonwealth Bureau of Meteorology is responsible for the preparation and issue of flood warnings. Bureau meteorologists in regional offices use observations from the network of stations throughout Australia and adjacent islands to make frequent assessments of the likelihood of heavy rain occurring over the many catchment areas. Daily rain reports from a selected network of key observing stations are telegraphed to the forecast centre each day at 9 a.m. A general warning of possible flooding is issued whenever Bureau meteorologists assess that rain sufficient to cause river rises is likely to occur within the next one to two days. Automatic rain gauges which will automatically report by radio signal the amount of rain received have been installed by the Bureau at some reporting stations where existing communications are liable to interruption at critical times and more of these gauges are to be installed within the next few years.

During periods of floods rainfall and river height reports are received every three hours from selected networks of stations. Most of these stations are situated in flood-free areas but the observers have agreed to provide reports during flood danger periods as a public service to residents of flood-affected areas. Staff at the flood forecasting centre make forecasts every three hours of expected river behaviour at the likely flood area. A revised forecast is issued after each new set of rainfall and river information has been received and analysed at the forecast centre. The Bureau's river forecasts refer to expected river behaviour at specified reference gauges. Local authorities in the flood-affected areas assume responsibility for interpreting the forecasts in terms of the expected areas and depths of flooding if the river reaches its predicted height at a reference gauge. In Victoria quantitative flood forecasting systems are in operation on the Snowy River to Orbost and on the La Trobe River to Yallourn. In co-operation with other authorities, similar systems will be introduced progressively on other rivers in the State.

The Bureau is setting up the best service possible on the basis of data collected from rainfall and river height observing stations that have operated during past floods. Often the coverage of these stations has been inadequate, so the Bureau is extending the network of rain gauges, pluviographs, and river gauges to obtain more adequate information about future floods. Analysis of the data should then lead to better forecasting methods and more useful warnings of expected floods. A considerable amount of data from the present network of rainfall and pluviograph stations has been published and is in course of preparation for publication on behalf of the Australian Water Resources Council.

Agricultural meteorology, 1964; Maritime meteorology, 1966; Aeronautical meteorology, 1967; Meteorology in fire prevention, 1968; Meteorological services for commerce and industry, 1969; Meteorological observations, 1970; Computers in meteorology, 1971

Melbourne

Temperature

The proximity of Port Phillip Bay bears a direct influence on the local climate of the metropolis. The hottest months in Melbourne are normally January and February when the average maximum temperature is just over 78°F. Inland, Watsonia has an average of 81°F., while along the Bay, Aspendale and Black Rock, subject to any sea breeze, have an average of 77°F. This difference does not persist throughout the year, however, and in July average maxima at most stations are within 1°F. of one another at approximately 55°F. The hottest day on record in Melbourne was 13 January 1939, when the temperature reached 114.1°F. which is the second highest temperature ever recorded in an Australian capital city. In Melbourne, the average number of days per year with maxima over 100°F. is about four, but there were sixteen in the summer of 1897-98 and there have been a few years with no occurrences. The average annual number of days over 90°F. is approximately nineteen.

Nights are coldest at places a considerable distance from the sea, and away from the city where buildings may maintain the air at a slightly higher temperature. The lowest temperature ever recorded in the city was

27°F. on 21 July 1869, and likewise, the highest minimum ever recorded was 87°F. on 1 February 1902.

In Melbourne, the overnight temperature remains above 70°F. on only about two nights a year and this frequency is the same for nights on which the air temperature falls below 32°F. Minima below 30°F. have been experienced during the months of May to August, while even as late as October extremes have been down to 32°F. During the summer minima have never been below 40°F.

Wide variations in the frequencies of occurrences of low air temperatures are noted across the metropolitan area. For example, there are approximately ten annual occurrences of 36°F. or under around the bayside, but frequencies increase to over twenty in the outer suburbs and probably to over thirty a year in the more frost susceptible areas. The average frost free period is about 200 days in the outer northern and eastern suburbs, gradually increasing to over 250 days towards the city, and approaches 300 days along parts of the bayside.

Rainfall

The range of average rainfall from month to month in the city is quite small, the annual average being 25.79 inches over 143 days. From January to August monthly averages are within a few points of 2 inches; then a rise occurs to a maximum of 2.65 inches in October. Rainfall is relatively steady during the winter months when the extreme range is from half an inch to 7 inches, but variability increases towards the warmer months. In the latter period totals range between practically zero and over 8 inches. The number of wet days, defined as days on which a point or more of rain falls, exhibits marked seasonal variation ranging between a minimum of eight in January and a maximum of fifteen each in July and August. This is in spite of approximately the same total rainfall during each month and indicates the higher intensity of the summer rains. The relatively high number of wet days in winter gives a superficial impression of a wet winter in Melbourne which is not borne out by an examination of total rainfall.

The average rainfall varies considerably over the Melbourne metropolitan area. The western suburbs are relatively dry and Deer Park has an average annual rainfall of 19.10 inches. Rainfall increases towards the east, and at Mitcham averages 35.48 inches a year. The rainfall is greater still on the Dandenong Ranges and at Sassafra the annual average is 53.93 inches.

The highest number of wet days ever recorded in any one month in the city is twenty-seven in August 1939. On the other hand, there has been only one rainless month in the history of the Melbourne records—April 1923. On occasions, each month from January to May has recorded three wet days or less. The longest wet spell ever recorded was eighteen days and the longest dry spell forty days. Over 3 inches of rain have been recorded in 24 hours on several occasions, but these have been restricted to the warmer months, September to April. Only twice has a fall above 2 inches during 24 hours been recorded in the cooler months.

Fogs

Fogs occur on an average of four or five mornings each month in May, June, and July, and average twenty days for the year. The highest number ever recorded in a month was twenty in June 1937.

Cloud and sunshine

Cloudiness varies between a minimum in the summer months and a maximum in the winter, but the range, like the rainfall, is not great compared with many other parts of Australia. The number of clear days or nearly clear days averages two to three each month from May to August, but increases to a maximum of six to seven in January and February. The total number for the year averages forty-seven. The high winter cloudiness and shorter days have a depressing effect on sunshine in winter and average daily totals of three to four hours during this period are the lowest of all capital cities. There is a steady rise towards the warmer months as the days become longer and cloudiness decreases. An average of over eight hours a day is received in January ; however, the decreasing length of the day is again apparent in February, since the sunshine is then less in spite of a fractional decrease in cloudiness. The total possible monthly sunshine hours at Melbourne range between 465 hours in December and 289 in June under cloudless conditions. The average monthly hours, expressed as a percentage of the possible, range between 55 per cent for January and February to 34 per cent in June.

Wind

Wind exhibits a wide degree of variation, both diurnally, such as results from a sea breeze, and as a result of the incidence of storms. The speed is usually lowest during the night and early hours of the morning just prior to sunrise, but increases during the day especially when strong surface heating induces turbulence into the wind stream, and usually reaches a maximum during the afternoon. The greatest mean wind speed at Melbourne for a 24 hour period was 22.8 mph, while means exceeding 20 mph are on record for each winter month. These are mean values ; the wind is never steady. Continual oscillations take place ranging from lulls, during which the speed may drop to or near zero, to strong surges which may contain an extreme gust, lasting for a period of a few seconds only, up to or even over 60 mph. At Melbourne, gusts exceeding 60 mph have been registered during every month with a few near or over 70 mph, and an extreme of 74 mph on 18 February 1951. At Essendon a wind gust over 90 mph has been measured.

Thunder, hail, and snow

Thunder is heard in Melbourne on an average of 14 days per year, the greatest frequency being in the summer months. On rare occasions thunderstorms are severe, with damaging wind squalls. Hail can fall at any time of the year, but the most probable time of occurrence is from August to November. Most hail is small and accompanies cold squally weather in winter and spring, but large hailstones may fall during thunderstorms in summer.

Snow has occasionally fallen in the city and suburbs ; the heaviest snow storm on record occurred on 31 August 1849. Streets and housetops were covered with several inches of snow, reported to be 1 ft deep at places. When thawing set in, floods in Elizabeth and Swanston Streets stopped traffic, causing accidents, some of which were fatal. One report of the event indicates that the terrified state of the Aborigines suggested they had never seen snow before.

The means of the climatic elements for the seasons in Melbourne computed from all available official records are given in the following table :

MELBOURNE—MEANS OF CLIMATIC ELEMENTS

Meteorological elements	Spring	Summer	Autumn	Winter
Mean atmospheric pressure (millibar)	1015.1	1013.1	1018.3	1018.3
Mean temperature of air in shade (° F.)	57.8	66.7	59.5	50.1
Mean daily range of temperature of air in shade (° F.)	18.7	21.1	17.4	14.0
Mean relative humidity at 9 a.m. (saturation=100)	63	60	72	80
Mean rainfall (inches)	7.28	6.00	6.65	5.85
Mean number of days of rain	40	25	34	44
Mean amount of evaporation (inches)	10.28	17.34	8.13	3.79
Mean daily amount of cloudiness (scale 0 to 8) (a)	4.9	4.2	4.8	5.2
Mean daily hours of sunshine	5.9	7.7	5.2	3.9
Mean number of days of fog	1.5	0.6	6.5	11.7

(a) Scale 0 = clear, 8 = overcast.

In the following table are shown the yearly means of the climatic elements in Melbourne for each year 1966 to 1970. The extreme values of temperature in each year are also included.

MELBOURNE—YEARLY MEANS AND EXTREMES OF CLIMATIC ELEMENTS

Meteorological elements	1966	1967	1968	1969	1970
Mean atmospheric pressure (millibars)	1017.2	1018.1	1014.5	1017.5	1015.8
Temperature of air in shade (° F.)—					
Mean	59.3	59.5	60.2	59.4	59.1
Mean daily maximum	67.5	68.1	68.2	67.4	67.0
Mean daily minimum	51.1	50.9	52.1	51.5	51.3
Absolute maximum	102.8	105.2	110.6	101.6	99.1
Absolute minimum	32.9	34.2	35.2	30.5	33.0
Mean terrestrial minimum temperature (° F.)	48.4	48.6	49.6	49.6	48.5
Number of days maximum 100° F. and over	5	5	8	3	..
Number of days minimum 36° F. and under	7	4	3	3	3
Rainfall (inches)	26.81	13.06	20.96	24.60	31.63
Number of wet days	157	106	141	137	153
Total amount of evaporation (inches) (a)	47.08	55.15	59.56	56.60	57.39
Mean relative humidity (saturation = 100)	63	63	63	65	61
Mean daily amount of cloudiness (scale 0 to 8) (b)	4.8	4.4	4.8	4.7	4.9
Mean daily hours of sunshine (c)	6.0	6.5	6.4	5.8	6.3
Mean daily wind speed (mph)	6.9	5.9	6.2	7.2	7.1
Number of days of wind gusts 39 mph and over	47	46	79	41	62
Number of days of fog	6	24	3	7	9
Number of days of thunder	6	3	12	8	12

(a) Since 1967 evaporation has been measured by Class A Pan.

(b) Scale 0 = clear, 8 = overcast.

(c) Since 1968 sunshine has been measured at Laverton.

Victorian weather summary 1970

Rainfall for 1970 was above average over all of Victoria except parts of the Mallee and Wimmera. At some places in southern Victoria it was the wettest year on record. January, March, April, August, November, and December were notably wet months, while June, July, and October were dry.

On the first night of the year heavy rain fell in the Central and west Gippsland districts. In Melbourne 2.12 inches fell in eight hours, causing local flooding, and flooding occurred on the Avon, Macalister, Thomson, and La Trobe Rivers. On 8 January 4 inches of rain fell in three hours during a thunderstorm in the St Albans area, and on 9 January a severe storm with hail damaged vines and crops in the Swan Hill district. The weather was generally dry from mid-January to mid-March except in eastern Gippsland, but there was very little hot weather. Mean temperatures were well below normal in January and in Melbourne there were only ten days during the summer when the temperature exceeded 90°F., the lowest number for 45 years. No serious bushfires occurred during the 1969–70 season.

Heavy rain fell in all districts from 19 to 23 March. In Melbourne 3.31 inches fell in three days, the highest three day fall in March for 21 years. In south Gippsland 9 inches fell in this period causing flash flooding of coastal streams. More rain fell in all districts at Easter in the last week of March, and rainfall for April was above average throughout the State. Heavy rain fell in all districts on 21–22 April. Rainfall in May was again above average in Gippsland and Central Districts, but less than half normal in the north-west. Heavy rain in Gippsland at the end of May caused flooding in streams east of the La Trobe. On 6 May temperatures were well below normal with hail, showers, and snowfalls on the Dandenong Ranges. Rainfall was below average in all districts in June and in all but the west coast and west Gippsland in July. A few places in the northern Mallee received no rain in July for the first time on record. The last week of June was mild with mean temperatures well above average in the western half of the State.

On the night of 1 August severe thunderstorms occurred in southern Victoria and wind squalls caused structural damage in the Melbourne area. Very heavy rain fell in the north-east in the last week of August and the Murray River reached its highest level for many years at Albury and Corowa. Floods also occurred in most rivers in the north-east and Gippsland. Rainfall totals for August were above average throughout the State and the highest on record at some places in the Western District, while mean temperatures were below normal in most of the State in August and September. In Melbourne the temperature did not reach 69°F. in September for the first time on record. Further widespread rain fell in the last week of September, causing a renewal of flooding in the north-east and on the Murray. Flooding also occurred on the Barwon and Werribee Rivers from 23 to 25 September.

By contrast, October's rainfall was below average throughout the State. Many places in northern Victoria had their driest October for 30 years. Late frosts caused damage to wheat, fruit, and vegetable crops on 15 and 23 October. The night of 4–5 October was unusually warm and at midnight Melbourne's temperature was 80°F. On 11 November thunderstorms brought torrential rain to some places in northern Victoria, up to 3 inches being recorded in 3 hours. On 14–15 November up to 4.5 inches of rain fell

in 8 hours in the south-west and some flooding occurred. Some places in the western Wimmera had their wettest November on record. Heavy rain fell in Gippsland on 9-10 December, up to 5 inches falling in 24 hours, and flooding occurred on rivers from the La Trobe to the Snowy. Following warm to hot weather at Christmas, heavy thunderstorms on 27 December presaged a week of cool and wet weather which continued into the first few days of 1971. Heavy rain fell in the eastern suburbs of Melbourne in the early hours of 30 December, over 2 inches falling in 2 hours, bringing the month's rainfall to the highest on record. It was also the wettest December on record at some places in Gippsland.

2

GOVERNMENT AND ADMINISTRATION

CONSTITUTION

The present Constitution of Victoria derives from an Act passed by the Parliament at Westminster in 1855 and known in Victoria as The Constitution Act. That Act, together with *The Constitution Act Amendment Act 1958* (which consolidates the many constitutional provisions passed by the Victorian Parliament itself since 1855), provides the legal and constitutional background to a system of responsible Cabinet government based on a legislature of two Houses, both elected upon adult suffrage. The Victorian Constitution has also been affected by the establishment of the Commonwealth Constitution by the *Commonwealth of Australia Constitution Act 1900*, by which legislative and executive powers upon certain specified matters were granted to the Commonwealth Parliament and Government, some of them exclusively, and provision was made that, in the case of inconsistency of valid laws, the Commonwealth law should prevail. In the result, the Parliament of Victoria may now make laws in and for Victoria upon all matters not exclusively granted to the Commonwealth by the Commonwealth Constitution, but upon some of these matters the Victorian law may be superseded by the passing of a Commonwealth Act. Local government, that is, the control exercised by municipal councils within their respective districts, is a matter of State law and wholly within the legislative control of the Victorian Parliament.

Governor

Under the Victorian Constitution, the ultimate Executive power is vested in the Crown and is exercised by the Governor as the Queen's representative.

The Governor's authority is derived from Letters Patent (issued in 1900 and amended in 1913) under the Great Seal of the United Kingdom, from the Commissions of Appointment, and from the Governor's Instructions issued under the Royal Sign Manual and Signet.

As the Queen's representative, the Governor summons and prorogues Parliament and at the beginning of each session outlines the Government's legislative programme in his opening speech. In the name of the Queen he gives assent to Bills which have passed all stages in Parliament, with the exception of those especially reserved for the Royal Assent. These include Bills dealing with special subjects such as divorce, or the granting of land and money to himself. His functions in relation to the Legislature are contained in The Constitution Act and The Constitution Act Amendment Act.

As head of the Executive, his functions are based on the Letters Patent, his Commission, and the Royal Instructions. These empower him to make all appointments to important State offices other than those under the Public Service Act, to make official proclamations, and to exercise the prerogative of mercy by reprieving or pardoning criminal offenders within his jurisdiction. These functions are carried out on the advice of his Ministers.

There are some matters, however, which require the special exercise of the Governor's discretion. Thus he alone must finally decide after taking advice of his Premier, whether to grant a dissolution of Parliament, and whether to call upon a member of Parliament to form a new Ministry. The Governor's powers in respect of the commissioning of a member of Parliament as Premier to form a new Ministry are set out more fully below under the section describing the Cabinet.

The Governor also has power to appoint a Deputy to exercise his functions as the Queen's representative during his temporary absence from the seat of government whether within or outside Victoria.

In the execution of the powers and authorities vested in him, the Governor shall be guided by the advice of the Executive Council, which is a body created under the Governor's Instructions and which in practice gives effect to Cabinet and ministerial decisions. If in any case he shall see sufficient cause to dissent from the opinion of the Council, he may act in the exercise of his powers and authorities in opposition to the opinion of the Council, reporting the matter to the Queen without delay, with the reasons for his so acting.

This exercise of discretionary powers emphasises the Governor's position as one above and beyond party politics and in extreme cases provides a safeguard of the Constitution. The general nature of his position is such that he is the guardian of the Constitution and bound to see that the great powers with which he is entrusted are not used otherwise than in the public interest.

On all official State occasions he performs the ceremonial functions as the representative of the Crown, and so becomes the focal point and the unifying symbol of the community.

The present Governor is Major-General Sir Rohan Delacombe, K.C.M.G., K.C.V.O., K.B.E., C.B., D.S.O., K.StJ., who assumed office on 8 May 1963.

A list of representatives of the Sovereign since the establishment of the Port Phillip District in 1839 is set out on pages 68–70 of the *Victorian Year Book* 1961.

Lieutenant-Governor

The Lieutenant-Governor is appointed by a Commission from the Sovereign under the Sign Manual and Signet. In the Commission reference is made to the Letters Patent constituting the office of Governor, and the Lieutenant-Governor is expressly authorised and required by his Commission to administer the Government of the State of Victoria in the events dealt with in such Letters Patent, namely, the death, incapacity, or removal of the Governor, or his departure from the State, or his assuming the administration of the Government of the Commonwealth of Australia.

The Lieutenant-Governor assumes control in any of these events by issuing a proclamation. He then becomes His Excellency the Lieutenant-Governor of Victoria.

However, should the Governor be only temporarily absent for a short period from the seat of government or from the State (except when he administers the Government of the Commonwealth of Australia) he may, by an Instrument under the Public Seal of the State, appoint the Lieutenant-Governor as his Deputy.

The present Lieutenant-Governor is Lieutenant-General the Hon. Sir Edmund Francis Herring, K.C.M.G., K.B.E., D.S.O., M.C., E.D.

Executive Council

Section 15 of *The Constitution Act Amendment Act 1958* provides that officers appointed as responsible Ministers of the Crown shall also be members of the Executive Council, and provision for their appointment appears in the Letters Patent constituting the office of Governor.

The Executive Council, consisting of Executive Councillors under summons, namely, members of the current Ministry, usually meets weekly or as required. The quorum of three comprises the Governor and at least two Ministers. These meetings are of a formal nature and are presided over by the Governor or in his absence by his Deputy.

Where it is provided in the statutes that the Governor in Council may make proclamations, orders, regulations, appointments to public offices, etc., the Governor acts formally with the advice of the Executive Council, but actually in accordance with Cabinet or ministerial decisions.

Cabinet

Formation and composition of Cabinet

Victoria has followed the system of Cabinet government evolved in Britain. The Queen's representative in Victoria, the Governor, acts by convention upon the advice of a Cabinet of Ministers, the leader of whom is called the Premier, although there is no mention of Cabinet as such in the Victorian Constitution.

The authority under which Victorian Ministers are appointed is contained in section 15 of *The Constitution Act Amendment Act 1958*, which provides that the Governor may, from time to time, appoint up to fifteen officers who are either members or capable of being elected members of either House of Parliament. No Minister shall hold office for a longer period than three months unless he is or becomes a member of the Legislative Council or the Legislative Assembly. This section further provides that not more than five of such officers shall at any one time be members of the Legislative Council and not more than eleven members of the Legislative Assembly.

In practice, a Ministry remains in office only while it has the support of a majority in the Legislative Assembly, and when a change of Government occurs and a new Ministry is to be appointed the Governor "sends for" that member of the Legislative Assembly who he thinks would be supported by a majority in that House and asks him whether he is able and willing to form a new Government with himself as leader. If that member can

assure the Governor accordingly, he may then be commissioned by the Governor to form a Ministry.

The names of those persons who are chosen to serve in his Ministry are then submitted by the Premier-elect to the Governor for appointment by him as responsible Ministers of the Crown.

Powers of Cabinet

The Cabinet is responsible politically for the administrative acts of the Government, but the constitutional powers as set out in The Constitution Act and other Acts are vested in the individual Ministers and the Governor in Council, namely, the Governor with the advice of the Executive Council. Cabinet as such has no legal powers.

Government administration includes departments under direct ministerial control as well as certain public statutory corporations which are subject to varying degrees of ministerial direction. Ministers are sworn in with appropriate portfolios which indicate their particular responsibilities.

Functions and methods of procedure

Cabinet normally meets weekly or as occasion requires, in secret and apart from the Governor, to consider an agenda made up of matters submitted by the Premier and other Ministers. The Premier's Department prepares a draft agenda for each meeting; but the Premier himself is responsible for the final agenda and the order of items on the agenda.

There is in practice no Cabinet secretariat; but *The Constitution Act Amendment Act 1958* provides for the payment of a salary to any member of the Council or of the Assembly who is recognised as the Parliamentary Secretary of the Cabinet.

The recording of decisions is primarily the responsibility of the Parliamentary Secretary of the Cabinet. There is no special machinery for circulating Cabinet minutes. Where necessary, the Secretary to the Premier's Department issues the instructions; but, where a particular Minister is concerned, the Minister is normally responsible for the execution of Cabinet decisions.

In general, Cabinet decisions are given legal effect either by the appropriate Minister or by the Governor in Council.

MINISTRIES

A list of Government officers administering Victoria from 1851 to 1855 and of Premiers of the Governments from 1855 to 1955 is set out on pages 72-4 of the *Victorian Year Book 1961*.

Ministries, 1943 to 1972

The following is a list of the Premiers of the Governments from 1943 to 1972:

Ministry and name of Premier	Date of assumption of office	Date of retirement from office	Duration of office (days)
Albert Arthur Dunstan	18 September 1943	2 October 1945	746
Ian Macfarlan	2 October 1945	21 November 1945	51
John Cain	21 November 1945	20 November 1947	730
Thomas Tuke Hollway	20 November 1947	3 December 1948	380
Thomas Tuke Hollway	3 December 1948	27 June 1950	572
John Gladstone Black McDonald	27 June 1950	28 October 1952	855
Thomas Tuke Hollway	28 October 1952	31 October 1952	4
John Gladstone Black McDonald	31 October 1952	17 December 1952	48
John Cain	17 December 1952	31 March 1955	835
John Cain	31 March 1955	7 June 1955	69
Henry Edward Bolte	7 June 1955	Still in office	

Present Ministry

The last triennial elections for the Legislative Council and the last general election for the Legislative Assembly were held conjointly on 30 May 1970.

At 31 August 1971 the 62nd Ministry, led by the Hon. Sir Henry E. Bolte, G.C.M.G., consisted of the following members :

From the Legislative Assembly :

The Hon. Sir Henry Bolte, G.C.M.G.	Premier and Treasurer
The Hon. R. J. Hamer, E.D.	Chief Secretary
The Hon. G. O. Reid, Q.C.	Attorney-General
The Hon. L. H. S. Thompson	Minister of Education
The Hon. E. R. Meagher, M.B.E., E.D.	Minister of Housing, Minister of Forests, and Minister for Aboriginal Affairs
The Hon. J. C. M. Balfour	Minister for Fuel and Power and Minister of Mines
The Hon. J. F. Rossiter	Minister of Health
The Hon. V. F. Wilcox	Minister of Transport
The Hon. W. A. Borthwick	Minister of Lands, Minister of Soldier Settlement, and Minister for Conservation
The Hon. J. A. Rafferty	Minister of Labour and Industry and Assistant Minister of Education
The Hon. I. W. Smith	Minister for Social Welfare
The Hon. R. C. Dunstan, D.S.O.	Minister of Water Supply

From the Legislative Council :

The Hon. G. L. Chandler, C.M.G.	Minister of Agriculture
The Hon. Murray Byrne	Minister of Public Works
The Hon. V. O. Dickie	Minister of State Development, Minister for Tourism, and Minister of Immigration
The Hon. A. J. Hunt	Minister for Local Government

JUDICIARY

The following list shows members of the Victorian Judiciary at 30 September 1971:

Supreme Court of Victoria*Chief Justice*

The Honourable Sir Henry Arthur Winneke, K.C.M.G., O.B.E.

Puisne Judges

The Hon. Thomas Weetman Smith	The Hon. Murray Vincent McInerney
The Hon. Sir George Augustus Pape	The Hon. George Hermann Lush
The Hon. Sir Alexander Duncan Grant Adam	The Hon. Clifford Inch Menhennitt
The Hon. Douglas Macfarlan Little	The Hon. Hibbert Richard Newton
The Hon. Urban Gregory Gowans	The Hon. Francis Robert Nelson
The Hon. Oliver James Gillard	The Hon. Kevin Victor Anderson
The Hon. John Erskine Starke	The Hon. William Charles Crockett
The Hon. Edward Hamilton Esler Barber	The Hon. Ninian Martin Stephen

Judges of the County Court

George Leo Dethridge (<i>Chairman</i>)	Gordon Just
John Gerald Norris	Roland John Leckie
Benjamin James Dunn	Ivan Frederick Charles Franich
Trevor George Rapke	Thomas Bernard Shillito
Hubert Theodore Frederico	John Philip Somerville
Norman Alfred Vickery	William Joseph Martin
Arthur Charles Adams	Ian Gray
Dermot William Corson	Alec James Southwell
John Xavier O'Driscoll	Joseph Raymond O'Shea
James Herbert Forrest	James Galvin Gorman
Clive William Harris	Robert John Davern Wright
Eric Edgar Hewitt	

All information about the jurisdictions, powers, functions, etc., of the Courts is set out in the section on justice and the administration of the law in Part 8 of this *Year Book*.

STATE PARLIAMENT

The Constitution Act, creating a Legislative Council and a Legislative Assembly, was assented to by Her Majesty in Council on 21 July 1855, and came into operation in Victoria on 23 November 1855. Under this Act, Her Majesty was given power "by and with the advice and consent of the said Council and Assembly to make laws in and for Victoria in all cases whatsoever". Certain of these unlimited powers, however, are now exercised by the Legislature of the Commonwealth of Australia.

By virtue of the provisions of Act No. 7270 of 1965, membership of the Assembly was increased from sixty-six to seventy-three after the election of April 1967, while membership of the Council was increased from thirty-four to thirty-six by the addition of one member in July 1967, and a further one in June 1970. Council members are elected from two-member provinces for six year terms and Assembly members from single-member electorates for three year terms. Both Houses are elected on adult suffrage, and their powers are normally co-ordinate, although Money Bills must originate in the Legislative Assembly.

The provisions of the Constitution dealing with the Parliament have been frequently amended, as The Constitution Act gives the Victorian Parliament power to "repeal alter or vary" the Act itself, provided that the second and third readings of certain amending Bills are passed by an absolute majority of the members of each House. The most frequently amended sections of the Constitution dealing with the Parliament have been those setting out the relations between the Council and the Assembly, and

the qualifications of candidates and voters. The right, extended in the original Constitution Act, to assume the privileges, immunities, and powers of the House of Commons (as they stood at that time) was taken up in 1857 by the first Act passed by the Victorian Parliament. These include very wide powers to punish contempt. The publication of parliamentary reports and proceedings was made absolutely privileged in 1890.

The landmarks of Assembly suffrage were : 1857, manhood suffrage ; 1899, plural voting abolished ; and 1908, women's franchise. Adult suffrage for the Council was introduced in 1950. Payment of members has also been frequently adjusted. The present complex scale makes extra payments to the Leader of the third party as well as to the Leader of the Opposition ; Government, Opposition, and third party Whips and the Deputy Leader of the Opposition are also specially rewarded. Electorates are graded as "metropolitan", "urban", "inner country", and "outer country", and carry different allowances.

Parliament is summoned, prorogued, or dissolved by proclamation issued by the Governor. The duration of a Parliament depends upon the life of the Assembly (limited to three years), but may be ended by the Governor dissolving the Assembly before the expiration of that period. The Legislative Council cannot be dissolved except in special circumstances arising from disagreements between the two Houses. Its members are elected for six years, half of them retiring every three years. Members are capable of re-election. A session is that period between the summoning of Parliament and prorogation. When Parliament is prorogued all business on hand lapses and, if it is to be continued in the next session, it must be reintroduced.

There are three political parties at present (February 1972) represented in the Parliament of Victoria : the Liberal Party, the Australian Labor Party, and the Country Party. (See pages 79-81 for lists of members.) Of the thirty-six members of the Legislative Council, nineteen belong to the Liberal Party, nine to the Australian Labor Party, and eight to the Country Party. Of the seventy-three members of the Legislative Assembly, forty-two belong to the Liberal Party, twenty-two to the Australian Labor Party, and eight to the Country Party, and there is one Independent Labor member. The Liberal Party, having won the majority of seats at the general election of the Assembly in 1955, formed a Government which was returned to office at the general elections in 1958, 1961, 1964, 1967, and 1970. The Leader of that Party holds the office of Premier. The Australian Labor Party forms the official Opposition Party, while the Country Party sits on the corner benches on the Government side of the Assembly Chamber.

Functions of Parliament

The functions of Parliament consist of passing legislation and taking action to make available finances or funds as required for State expenditure. Legislation can be initiated by any member of Parliament in either House with the exception that all Money Bills, such as Bills for imposing a duty, rate, tax, or impost, or Bills for appropriating any part of the revenue of the State, must originate in the Assembly on the motion of a Minister. They may be rejected, but not altered, by the Council. The

Council, however, may suggest amendments in such Bills, provided these amendments will not have the effect of increasing any proposed charge or burden on the people and the Assembly may accept the suggested amendments if it so desires. In practice, almost all Bills are introduced by the Government in office as a result of policy decisions taken in Cabinet.

Parliamentary procedure

Parliament controls the Government in office by the Assembly's power, in the last resort, to pass a resolution of no-confidence in the Government or to reject a proposal which the Government considers so vital that it is made a matter of confidence. This would force the Government to resign. Procedure of each House is governed by Standing Orders, Rules, and practice, based mainly on the procedure of the House of Commons, and administered by the respective presiding officers: the President of the Legislative Council, the Speaker of the Legislative Assembly, and the respective Chairmen of Committees. The principal innovations in Assembly procedure are time limit of speeches and the elaborate ballot procedure at the opening of a new Parliament for the election of the Speaker.

The President of the Council holds office for the balance of the period for which he is elected as a member and may again be appointed if he retains his seat in the House. The election of a Speaker is the first business of a new Assembly after the members have taken the oath of allegiance. After this the Chairman of Committees is elected. The same order in debate is observed in Committee as in the House itself, the Chairman having final authority over all points of order arising when he is in the Chair.

The sittings of each House commence with the reading of the Lord's Prayer by the presiding officer. Before the business of the day, as set down on the Notice Paper, is called on, Ministers may be questioned on matters under their administrative control; notices of motion, such as motions for the introduction of Bills, or motions of a substantive or abstract nature, are given; petitions are presented; papers are laid on the Table; and messages from the Governor and from the other House are read. At this stage, members have the opportunity of moving a motion "that the House do now adjourn" which under the Standing Orders enables discussion on matters of urgent public importance.

Under "Orders of the Day" which now follows, Bills are dealt with in their various stages. All Bills, with the exception of the annual Appropriation Bill, when passed by both Houses are presented by the Clerk of the Parliaments to the Governor, who, acting on the advice of his "Council of Legislation", gives the Royal Assent. This advice is set out at the commencement of each Bill and is as follows: "Be it enacted by the Queen's Most Excellent Majesty by and with the advice and consent of the Legislative Council and the Legislative Assembly of Victoria. . . ." The Appropriation Bill is presented by the Speaker to the Governor for assent. Unless otherwise provided, all Acts come into force on the day of assent.

Private legislation, 1962; Money Bills, 1963; Parliamentary Committees, 1964; Resolving deadlocks between the two Houses, 1965; Parliamentary privilege, 1966; Presiding Officers of Parliament, 1967; Administrative machinery of Parliament, 1968; Hansard, 1969; Houses of Parliament, 1970; Parliamentary Papers, 1971

Conduct of debate

Parliamentary debate is best carried out in an atmosphere where, by the cut and thrust of debate, reasoned opinion results. To achieve this it is desirable that members be heard in succession on alternate sides of a question and that relative quiet should prevail. Disorder, even loud conversation, can interrupt a speaker's train of thought and, at the same time, prevent his arguments being heard. No member may read a prepared speech, although this rule is relaxed for Ministers introducing Bills, when it is most desirable that the proposals contained in the Bill be clearly explained to all. A member is expected, having listened to the speech of the preceding member, to draw his points in opposition to those already made, or to build upon an earlier speech made by a member from his own side of the House.

To conduct a debate in an ideal atmosphere, it is a prerequisite that rules exist and that these be known to all participants. The Standing Orders of each House of Parliament, when adopted by the respective Houses were, as required by The Constitution Act, submitted to the Governor for approval. They are mainly based upon rules of debate formulated by the House of Commons between the years 1547 and 1610. The Orders provide that, in matters for which no specific provision is made, recourse is had to the practices of the House of Commons. The interpretation and application of the rules of debate is the responsibility of the Presiding Officers.

A fundamental rule, and one most difficult for a Presiding Officer to enforce, is relevance of speeches to the subject matter of the discussion. Wide ranging speeches tend to confuse the issue and to waste the time of the House. It is a basic need to a clear decision that one subject only should be discussed at a time, and that the debate proceed by logicity of stages. This is achieved by a member rising and proposing a motion to the Chair; the Presiding Officer then proceeds to put the question to the House in the same terms used by the member when proposing the motion. The question is then open for discussion. A decision is reached when the Presiding Officer again repeats the question, stating his opinion that the "Ayes" or "Noes" have it. Unless the Presiding Officer's opinion is disagreed with, the question is then carried or defeated (as the case requires). In the event of a demand from those supporting either side of the question for a division, the Presiding Officer orders the bells to be rung and, at the conclusion of two minutes, orders the doors of the Chamber to be locked and appoints tellers for the "Aye" and "No" sides of the question. When an equality of votes is recorded in a division, the Presiding Officer gives a casting vote; he usually votes so as to maintain the status quo and to reserve the matter for future discussion.

Any question before the Chair can be the subject of an amendment. It is, moreover, competent for amendments to be moved to amendments; a process which, in theory at any rate, can continue indefinitely. When an amendment is proposed, unless the original proposition and the amendment can conveniently be taken together in discussion, the amendment is first dealt with and disposed of prior to returning to the main question.

The rules prevent discussion of subjects already on the Notice Paper under another heading. The rules of the Assembly prevent all discourteous references to the other House and the members of it. Until a House is

acquainted by Message from the other House of business which has been transacted there, the first House is presumed to be unaware of any matter being dealt with by the other. Thus references in one House, which could disrupt or influence a debate proceeding in the other, are avoided. The restriction on reflections on members is applied to members of one's own House as well (in the case of the Assembly) as those of the other. It is obviously more important in the case of reflections upon members of another House, as the member who is reflected upon is in no position to confront his detractor either to refute his statement or to demand an apology.

An ancient rule protects the impartiality of the Crown by decreeing that the Sovereign's name may not be introduced to influence debate. Likewise, other organs of the State and persons in authority (e.g., a Governor, a Presiding Officer, or a judge of a superior court) must not be criticised, unless a motion has been made with the express object of calling their conduct in question. References to matters which are *sub judice* are held to be out of order as liable to prejudice the course of justice.

It is also held to be wrong to refer disparagingly to an Act of Parliament as, to do so, would suggest that the Parliament had been in error in the decision to pass it, and all members of the Parliament are bound by the decisions the Parliament has already taken unless moving to amend a statute. A previous decision can only be rescinded after due notice and on a substantive motion carefully framed to ensure that all members are aware of the consequences of a vote and will be in no doubt as to the scope of the debate which must precede such a vote.

Analogous to the restriction of discussion on Acts of Parliament or other decisions already taken, is the "same question" rule which prevents the same matter being decided twice in a House of Parliament during the same session. The rule against anticipation has a somewhat similar operation in that it prevents members from raising matters which are to be discussed in the near future under a notice of motion or order of the day already standing on the business sheet.

Debate may be interrupted by a matter of privilege suddenly arising or by a member rising, during the speech of another member, to query the relevance of his remarks. Although infrequently used, lengthy debates are at times interrupted by the closure motion which, if carried, brings the debate to an immediate conclusion and any questions necessary to finalise the matter are at once put to a vote. A similar, but lengthier process, of terminating a debate is the use of the "guillotine". This method is most frequently applied to Bills and, when the motion for the "guillotine" to be applied is agreed to, fixes times for the termination of the various stages of discussion on a Bill.

Every member of the Parliament has the unquestioned right to speak to every question put from the Chair, but the greater the number of members of a House of Parliament and the heavier its legislative programme, the greater becomes the necessity for time limits on speeches by its members. Both the Victorian Houses limit the number of times a member may speak to a question before the House, although the Standing Orders grant more leniency during a debate in the Committee of the whole house.

Members are at all times expected to observe moderation of language in debate, and a number of words and expressions have at various times been

ruled by the Presiding Officers to be "unparliamentary". A member using an unparliamentary expression in the House is called upon to retract and apologise; if he fails to do so the Chair will "name" him and he will incur the displeasure of the House. This displeasure is usually shown by the House voting for his suspension for the remainder of the day's sitting. In cases of extreme provocation a longer period of suspension may be ordered.

Members of the State Parliament

Political parties

In the following pages political party affiliations of Members of State Parliament are indicated thus :

(ALP) Australian Labor Party.

(CP) Country Party.

(IND LAB) Independent Labor.

(LP) Liberal Party.

Legislative Council

The following list shows members of the Legislative Council elected at the last triennial election held on 30 May 1970. Their term of office commenced on 27 June 1970.

Member	Province	Number of electors on rolls	Number of electors who voted	Total percentage of electors who voted
Byrne, Hon. Murray (LP)	Ballaarat	60,232	57,781	95.93
Clarke, Hon. Michael Alastair (CP)	Northern	59,797	57,607	96.34
Dunn, Hon. Bernard Phillip (CP)	North-Western	47,475	45,585	96.02
Eddy, Hon. Randolph John (ALP)	Doutta Galla	126,260	118,183	93.60
Garrett, Hon. Raymond William, A.F.C., A.E.A. (LP)	Templestowe	148,433	140,895	94.92
Granter, Hon. Frederick James (LP)	Bendigo	63,239	60,246	95.27
Gross, Hon. Kenneth Samuel (LP)	Western	60,281	58,329	96.76
Hamer, Hon. Rupert James, E.D. (LP) (a)	East Yarra	121,326	112,982	93.12
Hamilton, Hon. Harold Murray, E.D. (LP)	Higinbotham	122,449	115,714	94.50
Hauser, Hon. Vernon Thomas (LP)	Boronia	152,109	144,618	95.08
Jenkins, Hon. Owen Glyndwr (LP)	South-Western	95,644	91,408	95.57
Kent, Hon. Daniel Eric (ALP)	Gippsland	85,763	81,221	94.70
Nicol, Hon. Graham John (LP)	Monash	124,218	114,453	92.14
O'Connell, Hon. Geoffrey John (ALP)	Melbourne	112,014	102,045	91.10
Swinburne, Hon. Ivan Archie (CP)	North-Eastern	55,008	52,293	95.06
Thomas, Hon. Herbert Arthur (ALP) (b)	Melbourne West	133,584	107,891	80.77
Walton, Hon. John Malcolm (ALP)	Melbourne North	112,869	107,092	94.88
Ward, Hon. Hector Roy (LP)	South-Eastern	150,158	142,464	94.88

(a) The Hon. Rupert James Hamer, E.D. resigned to contest the by-election for the Legislative Assembly Electoral District of Kew held on 17 April 1971. At a by-election held on the same day the Hon. Haddon Storey (LP) was elected in his stead.

(b) Elected on 24 October 1970 at a by-election following the decision on 4 September by the Court of Disputed Returns that Mr R. W. Walsh's election on 30 May 1970 was void. The figures shown are for the by-election.

Members of the Legislative Council who did not come up for election at the 1970 triennial election are shown in the following table; they were elected on 29 April 1967 and their terms of office commenced on 15 July 1967.

Member	Province	Number of electors on rolls	Number of electors who voted	Total percentage of electors who voted
Bradbury, Hon. Archibald Keith (CP)	North-Eastern	53,354	50,822	95.25
Campbell, Hon. William Montgomery (LP)	East Yarra	120,066	112,116	93.38
Chandler, Hon. Gilbert Lawrence, C.M.G. (LP)	Boronia	126,475	119,885	94.79
Dickie, Hon. Vance Oakley (LP)	Ballaarat	59,203	56,984	96.25
Elliott, Hon. Douglas George (ALP)	Melbourne	118,436	106,948	90.30
Fry, Hon. William Gordon (LP)	Higinbotham	118,025	110,970	94.02
Galbally, Hon. John William, Q.C. (ALP)	Melbourne North	113,880	108,465	95.24
Gleeson, Hon. Stanley Edmond (LP)	South-Western	89,727	85,131	94.88
Grimwade, Hon. Frederick Sheppard (LP)	Bendigo	62,300	59,061	94.80
Houghton, Hon. William Vasey (LP)	Templestowe	127,304	120,162	94.39
Hunt, Hon. Alan John (LP)	South-Eastern	127,426	120,893	94.87
Knight, Hon. Alexander Wilson (ALP)	Melbourne West	118,501	111,267	93.90
McDonald, Hon. Stuart Richard (CP)	Northern	58,242	56,463	96.95
Mack, Hon. Sir Ronald William (LP) (a)	Western	58,880	56,955	96.73
Mansell, Hon. Arthur Robert (CP)	North-Western	47,390	45,431	95.87
May, Hon. Robert William (CP)	Gippsland	82,057	77,746	94.75
Thompson, Hon. Lindsay Hamilton Simpson (LP) (b)	Monash	121,916	113,298	92.93
Triповich, Hon. John Matthew (ALP)	Doutta Galla	120,799	112,775	93.36

(a) The Hon. Sir Ronald William Mack died on 12 February 1968. At a by-election held on 6 April 1968, the Hon. Clive Alexander Mitchell (CP) was elected in his stead.

(b) The Hon. Lindsay Hamilton Simpson Thompson resigned to contest the election for the Legislative Assembly Electoral District of Malvern held on 30 May 1970. At a by-election held on 20 June 1970 the Hon. Charles Allen Moir Hider (LP) was elected in his stead.

President: The Hon. Raymond William Garrett, A.F.C., A.E.A.

Chairman of Committees: The Hon. Graham John Nicol.

Clerk of the Parliaments and Clerk of the Legislative Council: Alfred Reginald Bruce McDonnell, Esquire.

Legislative Assembly

The following list shows members of the Legislative Assembly elected at the general election held on 30 May 1970. It also includes details of electoral districts and voting at this last general election.

Member	District	Number of electors on rolls	Number of electors who voted	Total percentage of electors who voted
Amos, Derek Godfrey Ian (ALP)	Morwell	24,058	22,872	95.07
Balfour, Hon. James Charles Murray (LP)	Narracan	22,567	21,518	95.35
Billing, Norman Alexander William, K.StJ. (LP)	Heatherton	32,629	31,056	95.18
Birrell, Hayden Wilson (LP)	Geelong	23,051	21,916	95.08
Bolte, Hon. Sir Henry Edward, G.C.M.G. (LP)	Hampden	17,990	17,289	96.10
Bornstein, David Leon Frank (ALP)	Brunswick East	23,750	21,947	92.41
Borthwick, Hon. William Archibald (LP)	Monbulk	29,096	27,389	94.13
Broad, Henry George (CP)	Swan Hill	18,726	17,936	95.78
Burgin, Cecil William (LP)	Polwarth	18,320	17,745	96.86
Christie, Hon. Sir Vernon (LP)	Ivanhoe	26,654	25,031	93.91
Clarey, Reynold Arthur (ALP)	Melbourne	24,656	22,393	90.82
Crellin, Maxwell Leslie (LP)	Sandringham	25,657	24,138	94.08
Curnow, Esmond Julian (ALP)	Kara Kara	16,875	16,363	96.97
Dixon, Brian James (LP)	St Kilda	25,768	23,604	91.60
Doube, Hon. Valentine Joseph (ALP)	Albert Park	22,740	21,003	92.36
Doyle, Julian John (LP) (a)	Gisborne	24,174	22,862	94.57
Dunstan, Hon. Roberts Christian, D.S.O. (LP)	Dromana	23,027	21,612	93.86
Edmunds, Cyril Thomas (ALP)	Moonee Ponds	25,266	24,044	95.16
Evans, Alexander Thomas (LP)	Ballaarat North	24,137	23,206	96.14
Evans, Bruce James (CP)	Gippsland East	19,368	18,289	94.43
Fell, Robert William (ALP)	Greensborough	36,330	34,654	95.39
Floyd, William Laurence (ALP)	Williamstown	28,171	26,702	94.79
Fordham, Robert Clive (ALP)	Footscray	24,472	23,236	94.95
Ginifer, John Joseph (ALP)	Deer Park	37,093	35,489	95.68
Goble, Mrs Dorothy Ada (LP)	Mitcham	29,303	27,777	94.79
Hayes, Geoffrey Phillip (LP)	Scoresby	40,486	38,594	95.33

Member	District	Number of electors on rolls	Number of electors who voted	Total percentage of electors who voted
Holding, Allan Clyde (ALP)	Richmond	21,339	19,602	91.86
Jona, Walter (LP)	Hawthorn	24,974	23,081	92.42
Kirkwood, Carl (ALP)	Preston	24,293	23,000	94.68
Lewis, Edward Wallace (ALP)	Dundas	18,433	17,828	96.72
Lewis, William John (ALP)	Portland	18,641	18,033	96.74
Lind, Alan Alfred Campbell (ALP)	Dandenong	32,802	31,418	95.78
Lovegrove, Denis (ALP)	Sunshine	25,557	24,227	94.80
Loxton, Samuel John Everett (LP)	Prahran	25,827	22,899	88.66
McCabe, James Edmund (LP)	Lowan	18,553	18,020	97.13
MacDonald, James David (LP)	Glen Iris	24,992	23,339	93.39
MacDonald, Russell Stanley Leslie (CP)	Rodney	19,245	18,562	96.45
McLaren, Ian Francis, O.B.E. (LP)	Bennettswood	27,469	26,164	95.25
MacLellan, Robert Roy Cameron (LP)	Gippsland West	18,666	17,812	95.42
Manson, Hon. James Williamson (LP)	Ringwood	31,471	29,948	95.16
Meagher, Hon. Edward Raymond, M.B.E., E.D. (LP)	Frankston	36,809	34,601	94.00
Mitchell, Hon. Thomas Walter (CP)	Benambra	19,016	18,077	95.06
Moss, Hon. George Colin (CP)	Murray Valley	19,498	18,419	94.47
Mutton, John Patrick (IND LAB)	Coburg	23,289	22,138	95.06
Rafferty, Hon. Joseph Anstice (LP)	Glenhuntly	27,796	25,903	93.19
Reese, William Frederick Llewellyn (LP)	Moorabbin	27,405	26,118	95.30
Reid, Hon. George Oswald, Q.C. (LP)	Box Hill	36,217	34,516	95.30
Ross-Edwards, Peter (CP)	Shepparton	20,041	19,274	96.17
Rossiter, Hon. John Frederick (LP)	Brighton	24,721	22,991	93.00
Rylah, Hon. Sir Arthur Gordon, K.B.E., C.M.G., E.D. (LP) (b)	Kew	25,807	23,998	92.99
Scanlan, Alan Henry (LP)	Oakleigh	25,162	23,889	94.94
Shilton, Leslie Victor (ALP)	Midlands	23,127	21,767	94.12
Simmonds, James Lionel (ALP)	Reservoir	26,854	25,650	95.52
Smith, Aurel (LP)	Bellarine	24,485	23,408	95.60
Smith, Hon. Ian Winton (LP)	Warrnambool	19,091	18,462	96.71
Stephen, William Francis (LP)	Ballaarat South	23,073	22,085	95.72
Stokes, Russell Newton (LP)	Evelyn	21,211	20,062	94.58
Suggett, Robert Harris (LP)	Bentleigh	26,642	25,449	95.52
Tanner, Sir Edgar Stephen, C.B.E., E.D. (LP)	Caulfield	26,691	24,433	91.54
Taylor, Alexander William, E.D. (LP)	Balwyn	27,124	25,326	93.37
Taylor, James Allister (LP)	Gippsland South	19,770	18,679	94.48
Templeton, Thomas William, J.P. (LP)	Mentone	26,925	25,302	93.97
Thompson, Hon. Lindsay Hamilton Simpson (LP)	Malvern	25,836	23,398	90.56
Trethewey, Robert Hugh (LP)	Bendigo	23,715	22,746	95.91
Trewin, Thomas Campion (CP)	Benalla	18,504	17,737	95.85
Trezise, Neil Benjamin (ALP)	Geelong North	25,206	23,981	95.14
Turnbull, Campbell (ALP)	Brunswick West	23,067	21,901	94.95
Wheeler, Kenneth Henry (LP)	Essendon	26,398	25,180	95.39
Whiting, Milton Stanley (CP)	Mildura	18,690	17,801	95.24
Wilcox, Hon. Vernon Francis (LP)	Camberwell	24,742	22,948	92.75
Wilkes, Frank Noel (ALP)	Northcote	24,180	22,686	93.82
Wilton, John Thomas (ALP)	Broadmeadows	34,766	33,228	95.58
Wiltshire, Raymond John (LP)	Syndal	35,111	33,611	95.73

(a) Mr Julian John Doyle resigned on 4 October 1971. At a by-election held on 11 December 1971 Mr Athol George Guy (LP) was elected in his stead.

(b) The Hon. Sir Arthur Rylah resigned on 5 March 1971. At a by-election held on 17 April 1971 the Hon. Rupert James Hamer, E.D. (LP) was elected in his stead.

Speaker : The Hon. Sir Vernon Christie.

Chairman of Committees : Sir Edgar Stephen Tanner, C.B.E., E.D.

Clerk of the Legislative Assembly : John Harold Campbell, Esquire.

Number of Parliaments and their duration

Between 1856 and 1970 there have been forty-five Parliaments. The forty-fifth Parliament was opened on 17 June 1970. A table showing the duration in days of each Parliament (1856 to 1927), the number of days in session, and the percentage of the latter to the former was published in the *Victorian Year Book* 1928-29, page 21. Similar information for the twenty-ninth to the thirty-ninth Parliaments (1927 to 1955) was published in the *Victorian Year Book* 1952-53 and 1953-54, page 31. As from the commencement of the thirty-eighth Parliament (20 June 1950), information about the duration of each Parliament, the number of sittings of each House, and the percentage of the latter to the former is shown in the following table :

VICTORIA—DURATION OF PARLIAMENTS AND NUMBER OF SITTINGS OF EACH HOUSE

Number of Parliament	Period	Duration of Parliament (a) (days)	Sittings			
			Legislative Assembly		Legislative Council	
			Number of sittings	Percentage of sittings to duration	Number of sittings	Percentage of sittings to duration
Thirty-eighth	1950-1952	865	131	15.1	81	9.4
Thirty-ninth	1952-1955	852	92	10.8	61	7.2
Fortieth	1955-1958	1,038	139	13.4	99	9.5
Forty-first	1958-1961	1,059	150	14.2	103	9.7
Forty-second	1961-1964	1,015	149	14.7	112	11.0
Forty-third	1964-1967	980	146	14.9	119	12.1
Forty-fourth	1967-1970	1,002	152	15.2	124	12.4

(a) Calculated from the date of opening to the date of dissolution of the Parliament.

Cost of parliamentary government

The following table reviews the expenditure arising from the operation of parliamentary government in Victoria. It comprises the State Governor, the Ministry, the Legislative Council, the Legislative Assembly, and electoral activities. It does not attempt to cover the expenditure on State administration generally.

The table shows this expenditure for the State for the years ended 30 June 1967 to 1971. In order to avoid incorrect conclusions about the cost of the Governor's establishment, it is pointed out that a large part of the expenditure (with the exception of the item "Salary") under the general heading "Governor" represents official services.

Parliamentary salaries and allowances were amended as from 1 December 1968. As from that date, the President of the Legislative Council and the Chairman of Committees, the Speaker of the Legislative Assembly and the Chairman of Committees, and Ministers of the Crown receive salaries and allowances only in connection with their offices.

VICTORIA—COST OF PARLIAMENTARY GOVERNMENT (\$'000)

Period	Governor		Ministry	Parliament		Electoral	Royal Commissions, Select Committees, etc.	Total
	Salary	Other expenses (a)		Salaries of members	Other expenses (b)			
1966-67	18	225	131	796	761	509	49	2,489
1967-68	20	294	90	870	828	154	41	2,297
1968-69	20	231	116	1,039	1,052	164	66	2,688
1969-70	20	218	168	1,138	1,184	506	114	3,349
1970-71	20	218	146	1,294	1,655	357	193	3,883

(a) Includes salaries of staff and maintenance of house and gardens.

(b) Includes cost of members' railway passes, parliamentary staff, and maintenance.

State Acts passed during 1970

The following Acts were passed by State Parliament during the year ended 31 December 1970 :

- | | | | |
|------|---|------|--|
| 7933 | Evidence (Boards and Commissions) Act amends the <i>Evidence Act</i> 1958 | 7948 | River Murray Waters Act ratifies and approves an agreement for the further variation of the agreement entered into between the Prime Minister of the Commonwealth and the Premiers of the States of New South Wales, Victoria, and South Australia respecting the River Murray and Lake Victoria and other waters |
| 7934 | The Constitution Act Amendment Act amends The Constitution Act and <i>The Constitution Act Amendment Act</i> 1958 in relation to the qualification of members of the Legislative Council and the Legislative Assembly | 7949 | River Murray Waters (Dartmouth Reservoir) Act ratifies and approves an agreement relating to financial assistance for the construction of the Dartmouth Reservoir |
| 7935 | Coroners (Amendment) Act amends the <i>Coroners Act</i> 1958 and the <i>Registration of Births Deaths and Marriages Act</i> 1959 | 7950 | Western Port (Steel Works) Act ratifies, validates, approves, and otherwise gives effect to an agreement between the Premier for and on behalf of the State of Victoria and John Lysaght (Australia) Limited with respect to the establishment in Western Port of steel works for the production of iron and steel and other products, to authorise the construction of certain port facilities, and to make provision with respect to the reclamation of certain land |
| 7936 | Town and Country Planning (Appeals Tribunal) Act amends the <i>Town and Country Planning Act</i> 1961 with respect to Appeals Tribunals | 7951 | Extractive Industries (Licences) Act amends the <i>Extractive Industries Act</i> 1966 |
| 7937 | Melbourne (Veterinary School) Lands Act relates to certain land in the City of Melbourne permanently reserved as a site for the purposes of a School of Veterinary Science in the University of Melbourne | 7952 | Stamps (Salary or Wages) Act repeals the provisions of the <i>Stamps Act</i> 1958 relating to the payment of duty on salaries or wages |
| 7938 | Board of Inquiry (Corrupt Practices) Act relates to the Board of Inquiry into allegations of corruption in the police force in connection with illegal abortion practices | 7953 | Melbourne Lands Exchange Act provides for the exchange of certain land in the City of Melbourne |
| 7939 | Cabrini Private Hospital (Guarantees) Act authorises the Treasurer of Victoria to guarantee the repayment of certain moneys proposed to be borrowed by the Cabrini Property Association | 7954 | Public Officers Salaries and Allowances Act relates to the salaries and allowances of certain public officers |
| 7940 | Judges' Salaries and Allowances Act relates to the remuneration of judges of the Supreme Court and the County Court | 7955 | Ballarat (Sovereign Hill) Land Act permanently reserves certain land in the Parish of Ballarat for recreation and public purposes and authorises the granting of a lease of the whole or any part of such land to the Ballarat Historical Park Association |
| 7941 | Instruments (Amendment) Act amends the <i>Instruments Act</i> 1958 | 7956 | Wombat Bonuses Act amends the <i>Vermin and Noxious Weeds Act</i> 1958 with respect to payment of bonuses for destruction of wombats |
| 7942 | La Trobe University (Amendment) Act amends the <i>La Trobe University Act</i> 1964 | 7957 | Richmond and Hawthorn Lands Act relates to certain lands in the cities of Richmond and Hawthorn |
| 7943 | Business Names (Amendment) Act amends the <i>Business Names Act</i> 1962 | 7958 | Solicitor-General (Pensions) Act amends the <i>Solicitor-General Act</i> 1958 with respect to pensions |
| 7944 | Acts Interpretation (Nationality) Act amends the <i>Acts Interpretation Act</i> 1958 | | |
| 7945 | Dairy Products (Board Membership) Act amends the <i>Dairy Products Act</i> 1958 to permit increase in the membership of the Dairy Products Board | | |
| 7946 | Melbourne Harbor Trust (Amendment) Act amends the <i>Melbourne Harbor Trust Act</i> 1958 | | |
| 7947 | Aboriginal Affairs (Amendment) Act amends the <i>Aboriginal Affairs Act</i> 1967 | | |

- 7959 Australia and New Zealand Banking Group Act supplements by legislation of the State of Victoria the Australia and New Zealand Banking Group Act 1970 of the United Kingdom relating to the transfer to the Australia and New Zealand Banking Group Limited of the undertakings of the Australia and New Zealand Bank Limited and The English, Scottish and Australian Bank Limited and for other purposes incidental thereto and consequential thereon and to authorise the Australia and New Zealand Savings Bank Limited to become a company deemed to be incorporated in Victoria and to preserve the identity of the company so incorporated with the Australia and New Zealand Savings Bank Limited an existing company within the meaning of the Companies Acts 1948 to 1967 of the United Kingdom and to provide the transfer to the Australia and New Zealand Savings Bank Limited of the undertaking of the E. S. & A. Savings Bank Limited
- 7960 Mildura Irrigation and Water Trusts (Amendment) Act amends the *Mildura Irrigation and Water Trusts Act 1958*
- 7961 Land Settlement (Financial) Act amends the *Land Settlement Act 1959*
- 7962 Securities Industry Act consolidates and amends the law with respect to the securities industry and trading in securities
- 7963 Mildura College Lands (Amendment) Act provides out of certain moneys for the Mildura High School, the Mildura Technical School, and the Irymple Technical School, and amends the *Mildura College Lands Act 1916*
- 7964 Door to Door (Sales) (Amendment) Act provides, with respect to certain credit purchase agreements, amendments to the *Door to Door (Sales) Act 1963*
- 7965 Consumer Protection Act constitutes a Consumer Affairs Council and establishes a Consumer Protection Bureau
- 7966 Justices (Alternative Procedure) Act amends the *Justices Act 1958* and the *Road Traffic Act 1958* with respect to the procedure for hearing or determining informations for certain offences
- 7967 Summary Offences Act amends the *Summary Offences Act 1966*
- 7968 Local Government (Amendment) Act amends the *Local Government Act 1958*, the *Melbourne and Geelong Corporations Act 1938*, and the *Strata Titles Act 1967*
- 7969 Motor Car (Falsification of Mileage) Act amends the *Motor Car Act 1958* with respect to the falsification of the recorded mileage of motor cars
- 7970 Marketable Securities Act repeals the *Marketable Securities Act 1967* and makes provisions with respect to instruments of transfer of certain marketable securities
- 7971 Carriers and Innkeepers (Amendment) Act amends the *Carriers and Innkeepers Act 1958* with respect to certain rights and liabilities of innkeepers and persons having dealings with innkeepers
- 7972 Cemeteries (Coburg Public Cemetery) Act amends the *Cemeteries Act 1958*
- 7973 Judges Pensions Act amends the *Supreme Court Act 1958*, the *County Court Act 1958*, and the *County Court (Jurisdiction) Act 1968*
- 7974 Victoria Institute of Colleges (Affiliated Colleges) Act amends the *Victoria Institute of Colleges Act 1965* and provides for the incorporation of governing bodies of affiliated colleges and amends the *Education Act 1958*
- 7975 Town and Country Planning (Responsible Authority) Act amends the *Town and Country Planning Act 1961* with respect to the enforcement of certain powers, functions, and duties of responsible authority by the Town and Country Planning Board
- 7976 Wheat Marketing (Special Quotas) Act amends the *Wheat Marketing Act 1969*
- 7977 Joint Select Committee (Meat Industry) Act provides for the appointment of a Joint Select Committee of the Legislative Council and the Legislative Assembly to inquire into and report upon certain questions relating to the meat industry in Victoria
- 7978 Joint Select Committee (Road Safety) Act provides for the appointment of a Joint Select Committee of the Legislative Council and the Legislative Assembly to inquire into and report upon certain questions relating to road safety
- 7979 Consolidated Revenue (Supply—July to September, 1970) Act grants supply to the Government for the year 1970–71
- 7980 Consolidated Revenue (Supplementary Estimates 1969–70) Act grants supply to the Government for the year 1969–70

- 7981 Consolidated Revenue (Supply—October to December, 1970) Act grants supply to the Government for the year 1970-71
- 7982 Home Finance (Amendment) Act amends the *Home Finance Act* 1962
- 7983 Co-operative Housing Societies (Amendment) Act amends the *Co-operative Housing Societies Act* 1958
- 7984 Soldier Settlement Act amends the *Land Settlement Act* 1959 and the *Soldier Settlement Act* 1958
- 7985 Judges' Pensions (Amendment) Act repeals part of the *County Court Act* 1958 and part of the *Supreme Court Act* 1958
- 7986 Civil Aviation (Carriers' Liability) Act amends the *Civil Aviation (Carriers' Liability) Act* 1961
- 7987 Road Traffic (Amendment) Act amends the *Road Traffic Act* 1958 in relation to the parking of vehicles at Parliament House and in alpine resorts; and amends the *Parliamentary Committees Act* 1968
- 7988 West Melbourne Market Land (Amendment) Act amends the *West Melbourne Market Land Act* 1956 and the *Wholesale Fruit and Vegetable Market Act* 1968
- 7989 West Gate Bridge Royal Commission Act appoints a Royal Commission to investigate the failure on 15 October 1970 of portion of the West Gate Bridge
- 7990 Motor Car (Amendment) Act amends the *Motor Car Act* 1958 and the *Motor Car Act* 1969
- 7991 Discharged Servicemen's Preference (Amendment) Act amends the *Discharged Servicemen's Preference Act* 1943
- 7992 Labour and Industry (Shop Closing) Act amends the *Labour and Industry Act* 1958 to require the closing of certain shops on certain days
- 7993 Country Fire Authority (Borrowing Powers) Act amends the *Country Fire Authority Act* 1958
- 7994 Crimes (Amendment) Act amends the *Crimes Act* 1958 and the *Justices Act* 1958
- 7995 Lotteries Gaming and Betting (Amendment) Act amends the *Lotteries Gaming and Betting Act* 1966
- 7996 River Improvement (Amendment) Act amends the *River Improvement Act* 1958 and the *Local Authorities Superannuation Act* 1958
- 7997 Hospitals Superannuation (Amendment) Act amends the *Hospitals Superannuation Act* 1965
- 7998 Trustee Companies (Perpetual Trustees Australia Limited) Act constitutes Perpetual Trustees Australia Limited a trustee company within the meaning of the *Trustee Companies Act* 1958
- 7999 Gas and Fuel Corporation (Borrowing) Act amends the *Gas and Fuel Corporation Act* 1958
- 8000 Victorian Inland Meat Authority (Amendment) Act amends the *Victorian Inland Meat Authority Act* 1958 in relation to the Constitution of the Authority
- 8001 Audit (Auditor-General) Act amends the *Audit Act* 1958
- 8002 Public Service (Amendment) Act amends the *Public Service Act* 1958
- 8003 Evidence (Scientific Tests) Act amends the *Evidence Act* 1958
- 8004 Boilers and Pressure Vessels Act consolidates and amends the law with respect to matters relating to boilers and pressure vessels
- 8005 Coal Mines (Pensions Increase) Act amends the *Coal Mines Act* 1958
- 8006 Stamps Act amends the *Stamps Act* 1958
- 8007 Methodist Church (Victoria) Property Trust Act constitutes the Methodist Church (Victoria) Property Trust and defines its powers, authorities, duties, and functions
- 8008 Land Conservation Act makes better provision in relation to the conservation of public land
- 8009 River Entrance Docks Railway Construction Act authorises the construction of a line of railway to connect the railways from Melbourne to Port Melbourne with the docks at the mouth of the Yarra River
- 8010 Legal Profession Practice (Amendment) Act amends the *Legal Profession Practice Act* 1958
- 8011 Juries Compensation Act amends the *Juries Act* 1967
- 8012 Public Account Act 1970 amends the *Public Account Act* 1958 and the *Audit Act* 1958
- 8013 Sewerage Districts (Amendment) Act amends the *Sewerage District Act* 1958
- 8014 Revocation and Excision of Crown Reservations Act revokes the permanent reservations of certain lands
- 8015 State Forests Works and Services Act authorises expenditure on works and services and other purposes relating to State forests
- 8016 Money Lenders (Prescribed Interest) Act amends the *Money Lenders Act* 1958

- 8017 Gas and Fuel Corporation (The Gas Supply Company Limited) Act relates to the purchase by the Gas and Fuel Corporation of Victoria of the gas undertakings of The Gas Supply Company Limited
- 8018 Labour and Industry (Amendment) Act amends the *Labour and Industry Act 1958*
- 8019 Metropolitan Fire Brigades (Amendment) Act amends the *Metropolitan Fire Brigades Act 1958*
- 8020 Stamps (Receipt Duty Abolition) Act abolishes stamp duty on receipts
- 8021 Apprenticeship (Amendment) Act amends the *Apprenticeship Act 1958*
- 8022 Water (Amendment) Act amends the *Water Act 1958*
- 8023 Melbourne Underground Rail Loop Act constitutes an authority to co-ordinate the financing and construction of an underground rail loop and ancillary works for the purpose of increasing the efficiency of the existing Melbourne suburban rail network, and authorises the construction of that underground rail loop and those ancillary works
- 8024 Westernport Development Act ratifies, validates, approves, and otherwise gives effect to a supplementary agreement between the Premier for and on behalf of the State of Victoria and Hematite Petroleum Proprietary Limited and Esso Exploration and Production Australia Incorporated with respect to port facilities in Western Port
- 8025 Vermin and Noxious Weeds (Amendment) Act amends the *Vermin and Noxious Weeds Act 1958*
- 8026 Commonwealth Places (Administration of Laws) Act relates to the administration of laws of the Commonwealth and of the State of Victoria in Commonwealth places
- 8027 Hairdressers Registration (Amendment) Act amends the *Hairdressers Registration (Amendment) Act 1968*
- 8028 Lifts and Cranes (Amendment) Act amends the *Lifts and Cranes Act 1967*
- 8029 Wodonga Lands Exchange Act provides, upon the surrender to Her Majesty of certain land in the township of Wodonga, for the reservation thereof as a site for a civic centre, and for revocation of the reservation of certain other land in the said township temporarily reserved as a site for a shire hall and offices, and for the grant thereof to the President, Councillors, and ratepayers of the Shire of Wodonga
- 8030 Second-hand Dealers (Charity Collectors) Act amends the *Second-hand Dealers Act 1958* to control and license collectors of articles for or on behalf of charitable organisations and amends the *Hospitals and Charities Act 1958* and the *Local Government Act 1958*
- 8031 Water Supply Works and Services Act authorises expenditure on works and services and other purposes relating to irrigation, water supply, drainage, sewerage, flood protection, and river improvement
- 8032 East Melbourne Land Act alters the permanent reservation of certain land at East Melbourne and the conditions of Crown Grant under which such land is held
- 8033 The Constitution Act Amendment (Responsible Ministers) Act makes provision for increasing the number of responsible Ministers of the Crown
- 8034 Justices (Bail and Appeals) Act amends the *Justices Act 1958*
- 8035 Forests (Amendment) Act amends the *Forests Act 1958*
- 8036 Maintenance (Amendment) Act amends the *Maintenance Act 1965*
- 8037 Hire Purchase (Insurance) Act amends the *Hire Purchase Act 1959*
- 8038 Marketable Securities (Amendment) Act provides with respect to certain instruments of transfer of marketable securities to amend the *Marketable Securities Act 1970*
- 8039 Mines (Compensation) Act amends the *Mines Act 1958* with respect to the payment of compensation for damage arising out of mining activities
- 8040 Railways Lands Act provides for the dismantling of certain railways
- 8041 Probate Duty Act amends the *Probate Duty Act 1962*
- 8042 Teaching Service (Tribunal) Act refers to the administration of the *Teaching Service Act 1958*
- 8043 Employers and Employé (Attachment of Wages) Act amends the *Employers and Employé Act 1958*
- 8044 *Aboriginal Lands Act 1970* provides that the lands reserved for the use of the Aborigines at Framlingham and Lake Tyers to be vested in a Framlingham Aboriginal Trust and a Lake Tyers Aboriginal Trust, respectively, regulates the affairs of the said Trusts, and amends the *Aboriginal Affairs Act 1967* and the *Land Tax Act 1958*
- 8045 Railway Works and Services Act authorises expenditure on works and services and other purposes relating to railways

- 8046 Water (Further Amendment) Act amends the *Water Act 1958* and the *River Improvement Act 1958*
- 8047 Superannuation (Amendment) Act amends the *Superannuation Act 1958*, the *Police Regulation Act 1958*, the *Pensions Supplementation Act 1966*, and the *Parliamentary Salaries and Superannuation Act 1968*
- 8048 Motor Car (Fees) Act increases certain fees payable under the *Motor Car Act 1958*, alters the allocation of revenue from those fees and for those purposes amends the *Motor Car Act 1958*, the *Local Government Act 1958*, and the *Country Roads Act 1958*
- 8049 Public Works and Services Act authorises expenditure on public works and services
- 8050 Western Port Steel Works (Development Control) Act extends the area and powers of the Western Port Regional Planning Authority and the President, Councillors, and ratepayers of the Shire of Hastings in relation to the establishment and operation by John Lysaght (Australia) Limited of a steel works and other works associated therewith at Western Port
- 8051 Housing (Amendment) Act amends the *Housing Act 1958*
- 8052 Urban Renewal Act provides for the replanning, redevelopment, and restoration of certain areas and amends the *Housing Act 1958*, the *Local Government Act 1958*, and the *Town and Country Planning Act 1961*
- 8053 Wheat Marketing (Amendment) Act amends the *Wheat Marketing Act 1969*
- 8054 Local Authorities Superannuation (Disability Benefits) Act amends the *Local Authorities Superannuation Act 1958* with respect to the payment of disability benefits
- 8055 Land Tax Act declares the rates of land tax for the year ending 31 December 1971 and amends the *Land Tax Act 1958* with respect to exemptions
- 8056 Environment Protection Act establishes an Environment Protection Authority, makes provision with respect to the powers, duties and functions of that authority, and makes further provision for the protection of the environment
- 8057 Gas Franchises Act sets out the rights of the Gas and Fuel Corporation of Victoria and The Colonial Gas Association Limited to supply gas in certain areas
- 8058 Road Traffic (Road Safety and Traffic Authority) Act amends the *Road Traffic Act 1958* and establishes the Road Safety and Traffic Authority
- 8059 Securities Industry (Amendment) Act amends the *Securities Industry Act 1970*
- 8060 Land (Amendment) Act amends the *Land Act 1958* and the *Mines Act 1958*
- 8061 Medical Practitioners Act re-enacts with amendments the law relating to the registration of medical practitioners
- 8062 Teacher Housing Act provides for adequate and suitable housing accommodation for teachers and provides for the establishment of a Teacher Housing Authority
- 8063 Criminal Appeals Act amends the *Crimes Act 1958* and the *Justices Act 1958* with respect to appeals in certain cases
- 8064 Groundwater (Amendment) Act amends the *Groundwater Act 1969*
- 8065 Summary Offences (Trespass to Farms) Act amends the *Summary Offences Act 1966* with respect to trespassing for certain purposes upon lands used in connection with primary production
- 8066 Registration of Births Deaths and Marriages (Amendment) Act amends the *Registration of Births Deaths and Marriages Act 1959*
- 8067 Tomato Processing Industry (Amendment) Act amends the *Tomato Processing Industry (Uniform Agreement) Act 1964*
- 8068 Weights and Measures (Amendment) Act amends the *Weights and Measures Act 1958* and amends the *Railways Act 1958* with respect to weights and measures
- 8069 Aerial Spraying Control (Amendment) Act amends the *Aerial Spraying Control Act 1966*
- 8070 Science Museum of Victoria Act constitutes a Council of the Science Museum of Victoria
- 8071 Melbourne and Metropolitan Board of Works Act amends the *Melbourne and Metropolitan Board of Works Act 1958* and authorises the Board to engage in research activities
- 8072 National Museum of Victoria Council Act constitutes the National Museum of Victoria Council and transfers thereto the powers, functions, and duties of the Trustees of the National Museum of Victoria
- 8073 Footwear Regulation Act amends and consolidates the law regulating the manufacture and sale of footwear

- 8074 Motor Car (Safety) Act provides with respect to safety belts in certain motor cars and with respect to the hours of driving of motor cars
- 8075 Summary Offences Act amends the *Summary Offences Act* 1966
- 8076 Fertilizers and Stock Foods (Labelling) Act amends the *Fertilizers Act* 1958 and the *Stock Foods Act* 1958
- 8077 Architects (Amendment) Act amends the *Architects Act* 1958
- 8078 Stock Diseases (Amendment) Act amends the *Stock Diseases Act* 1968
- 8079 Dog Act consolidates and amends the law relating to dogs
- 8080 Racing (Amendment) Act amends the *Racing Act* 1958
- 8081 State Development Act establishes a Department of State Development to promote and co-ordinate activities leading to the full and proper development of the State
- 8082 Statutory Salaries Act relates to the salaries, allowances, and fees of certain officers
- 8083 National Parks Act re-enacts and amends the law relating to national parks
- 8084 Workers Compensation Act increases the compensation payable under the *Workers Compensation Act* 1958 to remove certain restrictions on actions for damages by persons entitled to compensation under the *Workers Compensation Act* 1958 or under any scheme which was certified under the *Workers Compensation Act* 1928 and amends the *Workers Compensation Act* 1958
- 8085 Summary Offences (Trespassers) amends the *Summary Offences Act* 1966
- 8086 Parliamentary Salaries Act amends the *Constitution Act Amendment Act* 1958 and the *Parliamentary Salaries and Superannuation Act* 1968
- 8087 Consolidated Revenue (Final Supplementary Estimates 1969-70) Act grants supply to the Government for the year 1969-70
- 8088 Appropriation Act grants supply to the Government for the year 1971
- 8089 Social Welfare Act establishes a Social Welfare Department and provides with respect to the functions of that Department, and re-enacts with amendments certain provisions of the *Childrens Welfare Act* 1958, the *Gaols Act* 1958, the *Street Trading Act* 1958, the *Youth Organisations Assistance Act* 1958, and the *Social Welfare Act* 1960

Parliamentary Papers

The following Papers were presented to the Legislative Assembly during session 1970-71 and ordered by the House to be printed. Copies may be purchased on application to the Sales Section, Government Printing Office, Macarthur Street, Melbourne, 3002.

Finance :

A.1 Finance, 1969-70—Treasurer's Statement of Receipts and Expenditure for the year 1969-70, with Report, &c., of the Auditor-General

A.2 Supplementary Report of the Auditor-General for the year 1969-70

Messages from His Excellency the Governor :

B.1 Estimates of Receipts and Payments of the Consolidated Fund for the year 1970-71

B.2 Supplementary Estimates, 1969-70

B.3 Final Supplementary Estimates, 1969-70

B.4 Supplementary Estimates 1970-71

Returns to orders of the House :

C.1 Report of the Inspector appointed pursuant to Section 178 (1) of the *Companies Act* 1961 to investigate and report on the circumstances in which any person acquired or disposed of, or became entitled to acquire or dispose of any shares in Tasminex N.L.

C.2 Company Law Advisory Committee—Report to the Standing Committee of Attorneys-General on Fund Raising, Share Capital and Debentures

Reports from Select Committees :

D.1 Road Safety Committee—Fifth Progress Report—An Aspect of the Alcohol and Drug Factor—The Desirability of Compulsory Breath Analysis Tests for Motor Car Drivers Suspected of Having a Blood Alcohol Content in Excess of .05%

D.2 Public Accounts Committee—Report upon the Office of the Public Trustee with particular reference to the Accounts Branch

D.3 Road Safety Committee—Sixth Progress Report—Alcohol and Road Accidents

D.4 Statute Law Revision Committee—Report upon Evidence in Committal Proceedings, and Jurisdiction of Magistrates' Courts

D.5 Statute Law Revision Committee—Report upon the *Disposal of Uncollected Goods Act 1958*

D.6 Public Accounts Committee—Report upon Government Expenditure on Tourism

D.7 Statute Law Revision Committee—Report upon the proposals contained in the Imperial Acts Application (Repeals) Bill

D.8 Road Safety Committee—Seventh Progress Report—Permits for Learner Drivers

D.9 Statute Law Revision Committee—Report upon Recovery of Civil Debts, Venue and Enforcement of Fines in Magistrates' Courts

D.10 Public Accounts Committee—Treasury Minutes on Reports upon The Forestry Fund, Public Works Department, The Victorian Government Light Motor Transport System, The Control and Management of Stores operated by Government Departments and Public Authorities and the Office of the Public Trustee with particular reference to the Accounts Branch

D.11 Public Accounts Committee—Report upon the Auditor-General's Reports for the year 1969-70

D.12 Meat Industry Committee—Interim Report upon the Pet Food Industry

Papers presented to Parliament :

No. 31 Aboriginal Affairs—Report of the Ministry of Aboriginal Affairs for the year 1969-70

No. 35 Consumers Protection Council—Report for the year 1969-70

No. 5 Co-operative Housing Societies—Report of the Registrar for the year 1968-69

No. 6 Co-operative Societies—Report of the Registrar for the year 1968-69

No. 37 Country Roads Board—Report for the year 1969-70

No. 24 Education—Report of the Minister for the year 1968-69

No. 14 Egg and Egg Pulp Marketing Board—Report for the pool year ended 4th July, 1970

No. 9 Forests Commission—Report for the year 1969-70

No. 34 Friendly Societies and Benefit Associations—Report of the Government Statist for the year 1967-68

No. 26 Gas and Fuel Corporation—Report for the year 1969-70

No. 20 Health—Report of the Commission of Public Health for the year 1969-70

No. 27 Hospitals and Charities Commission—Report for the year 1969-70

No. 38 Hospitals Superannuation Board—Report for the year 1969-70

No. 18 Housing Commission—Report for the year 1969-70

No. 33 Labour and Industry Department—Report for the year 1970

No. 25 Liquor Control Commission—Report for the year 1969-70

No. 29 Mental Health Authority—Report for the year 1969

No. 22 National Parks Authority—Report for the year 1967-68

No. 39 National Parks Authority—Report for the year 1968-69

No. 36 Parole Boards (Youth)—Reports for the year 1969-70

No. 8 Police Department—Report for the year 1969

No. 28 Police Force—Report upon an Inspection by Colonel Sir Eric St Johnston, C.B.E., Q.P.M., H.M. Chief Inspector of Constabulary for England and Wales

No. 3 Port Phillip Authority—Report for the period 7th September, 1968 to 30th June, 1969

No. 30 Port Phillip Authority—Report for the year 1969-70

No. 12 Public Service Board—Report for the year 1969-70

No. 10 Railways—Report of the Victorian Railways Commissioners for the year 1969-70

No. 32 Rural Finance and Settlement Commission—Report for the year 1969-70

No. 23 Social Welfare Department—Report for the year 1969-70

No. 15 Soil Conservation Authority—Report for the year 1969-70

No. 2 State Development Committee—Report upon the Mineral Spa Water Resources of Victoria

No. 16 State Electricity Commission—Report for the year 1969-70

No. 21 State Rivers and Water Supply Commission—Report for the year 1969-70

No. 4 State Savings Bank—Reports, Statements, Returns &c. for the year 1969-70

No. 1 State Superannuation Board—Report for the year 1968-69

No. 17 Superannuation Fund—Ninth Investigation (as at 30th June, 1968) made by Mr. V. H. Arnold, F.I.A. (Government Statist and Actuary)

No. 7 Town and Country Planning Board—Report for the year 1968-69

No. 13 Transport Regulation Board—Report for the year 1969-70

No. 19 Victoria Institute of Colleges—Report of the Council for the year 1969

No. 11 Victorian Pipelines Commission—Report for the year 1969-70

STATE ELECTORAL SYSTEM

General*Electoral basis of the two houses*

When first constituted the Legislative Council or Upper House was composed of thirty members, aged 30 years and over, and possessed of freehold of the annual value of £500. Property qualifications were abolished by the *Legislative Council Reform Act 1950*, and today the main qualification of members and electors of the Legislative Council is the attainment of the age of 21 years. A similar provision applies to the Legislative Assembly.

For Legislative Council purposes Victoria is divided into eighteen Electoral Provinces, each represented by two members elected for six years—one in each Province retiring every three years by rotation—except at a general election following the dissolution of the Council, when one half of the members are to be elected for only three years.

For Legislative Assembly purposes the State is divided at present into seventy-three Electoral Districts, each returning one member. Members are elected for three years, unless Parliament is dissolved before this period.

Boundaries of Electoral Districts and Provinces are shown on folding maps facing pages 94 and 96 of the *Victorian Year Book 1971*.

Electoral redivision, 1965

Pursuant to the *Electoral Provinces and Districts Act 1965* a new redivision of Victoria for electoral purposes was carried out at the end of 1965 on the following basis :

1. the so-called "Port Phillip area", consisting of thirty-eight existing metropolitan and semi-metropolitan Districts and six parts of other Districts, was redivided into forty-four Electoral Districts for the Assembly, each containing approximately 25,000 electors ;
2. the remaining area of the State, i.e., "country area", was divided into twenty-nine Electoral Districts for the Legislative Assembly consisting of eight "provincial centre" electorates, each containing approximately 22,250 electors and twenty-one other electorates of a rural nature, each containing approximately 18,200 electors ; and
3. the "southern area" containing the nine existing Electoral Provinces of Doutta Galla, East Yarra, Higinbotham, Melbourne, Melbourne North, Melbourne West, Monash, Southern, and South-Eastern was redivided into ten new Provinces for the Legislative Council. The remaining eight country Provinces were unchanged.

The new Electoral Provinces and Districts formulated by the Commissioners empowered to undertake the above redivision were deemed to be accepted by Parliament, and the names and boundaries of the new Provinces and Districts were declared on 17 December 1965.

The provisions in *The Constitution Act Amendment Act 1958* relating to the automatic redivision of the State on the basis of two State Districts per Commonwealth Division disappeared when the new Districts came into force.

Enrolment of electors

Enrolment on the electoral roll is compulsory for every person of the age of 21 years or over who is a natural-born or naturalised subject of the Queen and who has resided in Australia for six months continuously, and in Victoria for at least three months and in one subdivision for at least one month. The electoral rolls for the State are compiled by the Commonwealth electoral authorities under a joint Commonwealth-State agreement, each Government paying half the cost of compilation. All Commonwealth and State parliamentary elections in Victoria are conducted on the basis of these joint rolls.

The compilation of the rolls is aided by the fact that the respective Legislative Council Provinces and Electoral Districts, as well as the Commonwealth Electoral Divisions, are subdivided into common subdivisions, which form the basic units for enrolment on the joint Commonwealth-State of Victoria rolls. When the new Provinces and Districts referred to above came into force the number of common subdivisions into which they are divided was increased from 297 to 323. This number was further increased by administrative action on 17 March 1969 to 386.

Number of enrolments on the joint rolls

Since 1924, when the Joint Rolls Arrangement was made between the Commonwealth of Australia and the State of Victoria, the electoral rolls prepared and maintained by the Commonwealth Electoral Officer for Victoria have been used at all Commonwealth elections and elections for the Legislative Assembly of Victoria.

The *Legislative Council Reform Act* 1950, which came into force on 1 November 1951, provided in substance for all electors for the Legislative Assembly to be automatically enrolled also for Legislative Council elections.

The Joint Rolls Arrangement was, therefore, appropriately amended and since 1952 the joint rolls have been used in Victoria for all Commonwealth elections and State parliamentary elections, whether for the Legislative Assembly or the Legislative Council.

VICTORIA—ELECTORS ENROLLED ON JOINT ROLL

At 30 June—	Number of electors enrolled	At 30 June—	Number of electors enrolled
1962	1,588,633	1967	1,745,919
1963	1,596,807	1968	1,759,803
1964	1,650,042	1969	1,789,153
1965	1,657,798	1970	1,852,023
1966	1,681,514	1971	1,857,354

Voting features of State elections

There is no plural voting at elections for either the Legislative Council or the Legislative Assembly. Provision for voting by post by electors who are ill or temporarily absent from their electorates, whether they are within Australia or not, is made at elections for both Houses, and there is also a system of "absent" voting whereby any elector who is not able to record a vote within his own subdivision is enabled to record a vote at any polling booth open in Victoria on the day of the poll. In addition, a method of so-called "unenrolled voting" has been instituted, under which

an elector whose name has been omitted from the official electoral rolls in error is enabled to record a vote upon making a prescribed declaration.

Voting at elections for both Houses is compulsory and is conducted under an adaptation of Ware's system of preferential voting.

This system of preferential voting at Victorian parliamentary elections was provided for by statute in 1911 for Legislative Assembly elections, in 1921 for Legislative Council triennial elections, and in 1936 for Legislative Council general elections following directly upon a dissolution of the Council in consequence of disagreements or deadlock between the two Houses. Under this system a voter is required to number the candidates in order of preference on the ballot-paper, the figure "1" being written opposite the name of the candidate whom the elector wishes to be returned, and sequential figures (2, 3, 4, etc.) indicating his relative degree of preference being written opposite the names of the other candidates. Where an elector has so indicated his order of preference for all candidates except one, he is deemed to have given his last contingent vote or preference to such candidate.

Where only two candidates are involved the candidate who receives an absolute majority (i.e., half the number of formal votes cast plus one) is declared elected. Similarly, where there are more than two candidates, if one of them receives an absolute majority on the count of first preferences, then he is declared elected.

Where no absolute majority is attained by a candidate at the count of first preference votes, the candidate who has received the fewest first preference votes is declared defeated, and his ballot-papers examined and his second preferences allotted to the candidates to whom they relate. The process of excluding the candidate with the lowest number of votes and distributing his ballot-papers according to the preferences shown on them to the unexcluded or continuing candidates is followed until one candidate attains an absolute majority.

At a general election for the Legislative Council when two members are required to be elected for each Province, the election of the first member is carried out as above. In the case of the election of the second member, however, a slight variation of procedure is necessary. The first step is to take the ballot-papers of the *first elected* candidate and allot the second preferences on them to the candidates to whom they relate. The remaining candidates begin the counting process with their own first preferences plus the second preferences allotted in the distribution of the elected candidate's ballot-papers. If one of the remaining candidates has an absolute majority, he is declared elected to the second vacancy. If, however, no such candidate has an absolute majority, the candidate with the fewest votes is declared defeated and the ballot-papers counted to him are then distributed according to the preferences shown thereon among the various continuing or unexcluded candidates.

The process of excluding the lowest candidate and distributing his ballot-papers according to the preferences on them to unexcluded or continuing candidates is followed until one candidate attains an absolute majority.

At a general election for the Legislative Council, the candidate first elected is entitled to hold the seat for six years, and the candidate next elected holds his seat for three years.

Areas of Legislative Assembly Districts

The following table shows the areas of the Districts of the Legislative Assembly created by the redivision in 1965 :

VICTORIA—LEGISLATIVE ASSEMBLY: AREAS OF DISTRICTS
(square miles)

State Electoral District (a)	Area	State Electoral District (a)	Area
Albert Park	7.50	Heatherton	27.34
Ballaarat North	805.00	Ivanhoe	7.00
Ballaarat South	1,160.00	Kara Kara	4,470.00
Balwyn	6.30	Kew	7.15
Bellarine	570.00	Lowan	6,590.00
Benalla	5,375.00	Malvern	4.36
Benambra	4,020.00	Melbourne	10.42
Bendigo	890.00	Mentone	8.40
Bennettswood	7.62	Midlands	2,520.00
Bentleigh	4.85	Mildura	8,670.00
Box Hill	19.60	Mitcham	8.20
Brighton	4.80	Monbulk	147.00
Broadmeadows	57.20	Moonee Ponds	4.80
Brunswick East	4.25	Moorabbin	6.69
Brunswick West	3.95	Morwell	1,150.00
Camberwell	5.00	Murray Valley	2,165.00
Caulfield	3.59	Narracan	1,190.00
Coburg	5.22	Northcote	5.72
Dandenong	44.80	Oakleigh	6.41
Deer Park	60.60	Polwarth	2,730.00
Dromana	780.00	Portland	4,500.00
Dundas	6,300.00	Prahran	3.31
Essendon	7.25	Preston	5.00
Evelyn	2,575.00	Reservoir	8.65
Footscray	7.15	Richmond	3.57
Frankston	61.80	Ringwood	48.80
Geelong	10.42	Rodney	2,335.00
Geelong North	12.58	St Kilda	3.05
Gippsland East	11,030.00	Sandringham	6.70
Gippsland South	2,900.00	Scoresby	56.00
Gippsland West	945.00	Shepparton	1,080.00
Gisborne	1,340.00	Sunshine	9.35
Glenhuntly	4.55	Swan Hill	5,885.00
Glen Iris	5.20	Syndal	13.50
Greensborough	48.30	Warrnambool	934.00
Hampden	4,430.00	Williamstown	12.49
Hawthorn	4.56		
		Total (b)	88,150.00

(a) See pages 80-1 for number of electors and sitting members.

(b) The officially recognised "land area" of the State is 87,884 sq miles. The difference of 266 sq miles between "land" and "electoral" area is due to the inclusion of coastal waters such as Western Port and Corner Inlet in the electoral descriptions.

Areas of Legislative Council Provinces

The following table shows the areas of the provinces of the Legislative Council created by the redivision in 1965 :

VICTORIA—LEGISLATIVE COUNCIL :
AREAS OF PROVINCES
(square miles)

State Electoral Province (a)	Area
Ballaarat	5,505.00
Bendigo	4,452.00
Boronia	1,040.00
Doutta Galla	318.00
East Yarra	26.90
Gippsland	16,270.00
Higinbotham	33.54
Melbourne	25.83
Melbourne North	27.27
Melbourne West	603.00
Monash	22.46
Northern	9,055.00
North Eastern	11,672.00
North Western	20,680.00
South Eastern	1,856.00
South Western	4,042.00
Templestowe	431.00
Western	12,090.00
Total (b)	88,150.00

(a) See pages 79-80 for number of electors and sitting members.

(b) The officially recognised "land area" of the State is 87,884 sq miles. The difference of 266 sq miles between "land area" and "electoral area" is due to the inclusion of coastal waters such as Western Port and Corner Inlet in the electoral descriptions.

Parliamentary elections*Legislative Assembly*

At the Legislative Assembly election held on 30 May 1970 there were contests in all of the seventy-three Electoral Districts and in seventy-two of them more than two candidates were engaged.

In twenty-two of these contests the successful candidate had an absolute majority of the total first preferences recorded and consequently no distribution of further preferences was necessary. After the necessary distribution of second or subsequent preferences had been completed in the other fifty-one contests, the leading candidate on the first count was elected in forty-one instances but was defeated in the remaining ten instances.

The following table shows the voting in general elections held for the Legislative Assembly since 1952 :

**VICTORIA—VOTING AT GENERAL ELECTIONS FOR THE
LEGISLATIVE ASSEMBLY**

Year of election	Whole State	Contested Districts				
	Electors enrolled	Electors enrolled	Votes recorded		Informal votes	
			Number	Percentage of voters	Number	Percentage of total votes recorded
1952	1,402,705	1,119,486	1,047,671	93.59	18,991	1.81
1955	1,422,588	1,402,806	1,318,937	94.02	28,934	2.19
1958	1,478,065	1,478,065	1,392,813	94.23	24,760	1.78
1961	1,554,856	1,554,856	1,467,862	94.41	35,937	2.45
1964	1,635,311	1,635,311	1,543,778	94.40	35,631	2.31
1967	1,723,981	1,723,981	1,625,239	94.27	51,384	3.16
1970	1,827,595	1,827,595	1,728,362	94.57	55,141	3.19

NOTE. Detailed statistics are available in publications issued by the Chief Electoral Officer for Victoria.

The following table shows certain particulars of the representation in the Legislative Assembly in which general elections have been held since 1952:

VICTORIA—PARLIAMENTARY REPRESENTATION

Year of election	Number of members of Legislative Assembly	Mean population	Average population per member	Number of electors enrolled on date of election	Average number of electors per member	Proportion of persons enrolled to total population
						per cent
1952	65	2,343,610	36,056	1,402,705	21,580	59.9
1955	66	2,520,481	38,189	1,422,588	21,554	56.4
1958	66	2,717,371	41,172	1,478,065	22,395	54.4
1961	66	2,926,075	44,334	1,554,856	23,558	53.1
1964	66	3,105,685	47,056	1,635,311	24,777	52.7
1967	73	3,277,131	44,892	1,723,981	23,616	52.6
1970	73	3,449,404	47,252	1,827,595	25,036	53.0

Proportion of voters at elections

The first general election for the Legislative Assembly was held in 1856. The proportion of voters to electors of contested districts at each of the general elections held until 1958 for the Legislative Assembly is found on page 86 of the *Victorian Year Book* 1961.

Legislative Council

The Legislative Council consists of thirty-six members representing eighteen Provinces. Voting in elections held for the Legislative Council since 1952 is shown in the next table. At the triennial election of 30 May 1970 there were contests in all Provinces and in all of them more than two candidates were engaged.

In five of these the successful candidate had an absolute majority of the total first preferences recorded and consequently no distribution of further preferences was necessary. After the necessary distribution of second or subsequent preferences had been completed in the other thirteen contests,

the leading candidate on the first count was elected in ten instances but was defeated in the remaining three instances.

The following table shows particulars of elections for the Legislative Council :

VICTORIA—VOTING AT ELECTIONS FOR THE LEGISLATIVE COUNCIL

Year of election	Whole State	Contested Provinces				
	Electors enrolled	Electors enrolled	Votes recorded		Informal votes	
			Number	Percentage of voters	Number	Percentage of total votes recorded
1952	1,395,650	1,078,959	994,190	92.14	22,595	2.27
1955	1,430,130	1,216,010	1,112,951	91.52	23,189	2.08
1958	1,488,293	1,387,097	1,283,665	92.54	22,085	1.72
1961	1,554,856	1,554,856	1,467,482	94.38	46,697	3.18
1964	1,635,311	1,635,311	1,543,584	94.39	45,627	2.96
1967	1,723,981	1,723,981	1,625,371	94.28	59,895	3.69
1970	1,827,595	1,827,595	1,726,725	94.48	67,710	3.92

Further references. Various publications giving detailed statistics of State elections are issued by the Chief Electoral Officer for Victoria.

COMMONWEALTH PARLIAMENT

Victorian members

Political party affiliations of Victorian members of the Commonwealth Parliament are indicated thus :

- (ADLP) Australian Democratic Labor Party
- (ALP) Australian Labor Party
- (CP) Australian Country Party
- (LP) Liberal Party of Australia

Senate

The following are the Senators elected for Victoria sitting in the Senate at 31 January 1972 :

Brown, William Walter Charles (ALP)	<i>Retires</i> 1977
Cormack, Sir Magnus Cameron, K.B.E. (LP)	1974
Greenwood, Hon. Ivor John, Q.C. (LP)	1977
Guilfoyle, Margaret Georgina Constance (LP)	1977
Hannan, George Conrad (LP)	1974
Little, John Albert (ADLP)	1974
McManus, Francis Patrick (ADLP)	1977
Poyser, Arthur George (ALP)	1974
Primmer, Cyril Graham (ALP)	1977
Webster, James Joseph (CP)	1974

House of Representatives

The Victorian members elected to the House of Representatives on 25 October 1969 and the divisions they represent are shown below :

Member	Division
Brown, N. A. (LP)	Diamond Valley
Bryant, G. M. (ALP)	Wills
Buchanan, A. A. (LP)	McMillan
Cairns, J. F. (ALP)	Lalor
Calwell, Rt Hon. A. A. (ALP)	Melbourne
Cass, M. H. (ALP)	Maribyrnong
Chipp, Hon. D. L. (LP)	Hotham
Crean, F. (ALP)	Melbourne Ports
Erwin, Hon. G. D. (LP)	Ballaarat
Fox, E. M. C. (LP)	Henty
Fraser, Hon. J. M. (LP)	Wannon
Garrick, H. J. (ALP)	Batman
Gorton, Rt Hon. J. G., C.H. (LP)	Higgins
Hamer, D. J., D.S.C. (LP)	Isaacs
Holtten, Hon. R. McN. (CP)	Indi
Howson, Hon. P. (LP)	Casey
Jarman, A. W. (LP)	Deakin
Jenkins, H. A. (ALP)	Scullin
Jess, J. D., C.B.E. (LP)	La Trobe
Johnson, L. K. (ALP)	Burke
Kennedy, A. D. (ALP)	Bendigo
Kent Hughes, Hon. Sir Wilfred S., K.B.E., M.V.O., M.C., E.D. (LP) (a)	Chisholm
King, R. S. (CP)	Wimmera
Lynch, Hon. P. R. (LP)	Flinders
McEwen, Rt Hon. Sir John, C. H., K.C.M.G. (CP) (b)	Murray
McIvor, H. J. O.B.E. (ALP)	Gellibrand
Nixon, Hon. P. J. (CP)	Gippsland
Peacock, Hon. A. S. (LP)	Kooyong
Reid, L. S., D.F.C. (LP)	Holt
Scholes, G. G. D. (ALP)	Corio
Snedden, Hon. B. M., Q.C. (LP)	Bruce
Street, Hon. A. A. (LP)	Corangamite
Turnbull, Sir Winton, C.B.E. (CP)	Mallee
Whittorn, R. H. (LP)	Balaclava

(a) The Hon. Sir Wilfred Kent Hughes died on 31 July 1970. At a by-election held on 19 September 1970 Mr A. A. Staley (LP) was elected in his stead.

(b) The Rt Hon. Sir John McEwen resigned on 1 February 1971. At a by-election held on 20 March 1971 Mr Bruce Lloyd (CP) was elected in his stead.

Agent-General for Victoria in the United Kingdom and Northern Ireland, 1964

GOVERNMENT ADMINISTRATION

The administration of the Victorian State Government consists of the central government, that is, the departments of State and statutory bodies as listed in the following pages, and a local government network of 210 municipalities as described in Part 5.

Departments

The Public Service of Victoria consists of the State Departments of Agriculture, Chief Secretary, Crown Lands and Survey, Education, Health, Labour and Industry, Law, Local Government, Mines, Premier, Public Works, and Treasury, and the Ministries of Aboriginal Affairs, Tourism, and Transport. (The Forests Commission and State Rivers and Water Supply Commission are regarded as Departments for the purposes of personnel administration, their staffs having been made subject to the provisions of the Public Service Act.) These are the instruments of ministerial action and legislative enactment is generally not required to

establish, abolish, or re-organise a department, although this is sometimes the method used. All but three of the departments are organised so that all their activities are related in some way to a general function. The exceptions are Premier's, Chief Secretary's, and Treasury, which each embrace a wide variety of dissimilar activities.

Department of Agriculture

Minister : Minister of Agriculture

Permanent head : Director of Agriculture

The functions of this department are to regulate the agricultural industry, carry out research and investigation, and provide education, advisory, and extension services. These include maintaining standards of quality in production, prevention and control of disease, direct assistance and advice to primary producers, education through agricultural colleges, schools, and lectures, and research into crops, pastures, soils, livestock diseases, and pests. (For the history of the Department, see *Victorian Year Book* 1971, pages 105-8.)

The various branches and agencies are : Animal Health, Animal Industry, Agriculture, Horticulture, Dairying, Agricultural Education, Milk Board, Victorian Plant Research Institute, Analytical, and Information. The Department also controls and administers the Government Cool Stores at Victoria Dock, Melbourne.

Department of Crown Lands and Survey

Minister : Minister of Lands

Permanent head : Secretary for Lands

This Department is responsible for the disposal, in various forms of tenure, of Crown lands for agricultural and pastoral purposes and survey work in this connection ; the destruction of vermin and the eradication of noxious weeds ; the co-ordination of all survey work undertaken in the State and the compilation of comprehensive maps of the State ; and the provision of reserves of Crown land for recreational and other purposes. It is also responsible for the control and maintenance of the Royal Botanic Gardens and the National Herbarium, Melbourne. (For the history of the Department, see *Victorian Year Book* 1968, pages 100-2.)

Chief Secretary's Department

Minister : Chief Secretary

Permanent head : Under Secretary

The Chief Secretary's Department performs a multitude of diverse activities connected with the government of the State. It is the direct descendant of the first office of government established in the Colony of Victoria. (For the history of the Department, see *Victorian Year Book* 1963, pages 100-4.) Originally it performed almost all the functions of government, but over the years other departments have been created to undertake specific functions and the Chief Secretary's Department has been left with the remainder. It has also from time to time acquired other functions in response to governmental needs.

The various branches are : Electoral Branch, Fisheries and Wildlife, Government Statist, Police (including Motor Registration), Government

Shorthand Writers, State Immigration, Accident and Motor Car Insurance, State Library, National Gallery, National Museum, and Science Museum.

Other departmental functions are film censorship, racecourse licensing, totalisator inspection, declaration of public holidays, etc. The Department also provides administrative services for the Traffic Commission and Liquor Control Commission.

Education Department

Minister : Minister of Education

Permanent head : Director-General of Education

The function of the Education Department is to ensure that all children between the ages of 6 and 15 years receive efficient and regular instruction in general educational subjects and to provide higher education for older children. Planning State education is the responsibility of the Director-General of Education. The teaching service provides the teachers for all State schools, the Department being responsible for general administration, including provision and maintenance of school buildings, furniture and equipment, housing and salaries for teachers, transport of children to schools in country areas, and awarding scholarships and teaching bursaries. (For the history of the Department, see *Victorian Year Book* 1969, pages 107-10.)

Details of all aspects of education within the State are treated on page 427 and following of this *Victorian Year Book*.

Department of Health

Minister : Minister of Health

Permanent head : Secretary to the Department of Health

The Department of Health is required to take all such steps as may be desirable to secure the preparation, implementation, and co-ordination of measures conducive to the health of the people, including measures for the prevention and cure of diseases and the avoidance of fraud in connection with alleged remedies ; the treatment of physical defects and mental diseases and disorders ; the training of persons for health services ; the control, care, and treatment of mental defectives and epileptics ; the initiation and direction of research ; and the collection, preparation, publication, and dissemination of information and statistics relating to any of these matters.

These functions are carried out by the General Health, Mental Hygiene, Maternal and Child Welfare, and Tuberculosis Branches.

Department of Labour and Industry

Minister : Minister of Labour and Industry

Permanent head : Secretary for Labour and Industry

The main functions of the Department are concerned with wages and conditions of employment generally, including industrial safety, health and welfare ; the control and regulation of the industrial aspects of various trades ; industrial relations including the prevention and settlement of industrial disputes ; training within industry ; consumer protection ; and statistical research in the industrial field.

These functions are performed by the Wages Board Branch, Apprenticeship Commission, Industrial Branch, Consumer Protection Bureau, and the following Inspectorates : Factories and Shops, Boilers and Pressure Vessels, and Lifts and Cranes.

Law Department

Minister : Attorney-General

Permanent head : Secretary

The substantial function of the Department is concerned with the administration of justice in the various State courts. Other functions include giving legal advice and assistance to the public and the Government, registration of transfers of land, drafting of statutes, maintaining a register of companies and businesses, and the administration of estates. (For the history of the Department, see *Victorian Year Book* 1965, pages 100-4.)

The various branches are: Solicitor-General, Titles Office and Registrar-General, Companies Registration, Public Solicitor, Crown Solicitor, Parliamentary Draftsman, Courts, Court Reporting, and Public Trustee.

Local Government Department

Minister : Minister for Local Government

Permanent head : Secretary for Local Government

Prior to the Department's establishment in 1958, the supervision of local government activities was the responsibility of a branch of the Public Works Department. It is responsible for supervision of the administration by municipalities of the Local Government Act and related Acts, and the oversight of government funds allocated to assist municipalities with certain construction works (e.g., recreational facilities, swimming pools, and public halls in country areas). The Department also administers State Weights and Measures legislation. (For a history of local government in Victoria, see pages 103-5 of this *Year Book*.)

The Valuer-General's Office, whose major function is to co-ordinate valuations made for councils and other rating authorities, is included in this Department.

Mines Department

Minister : Minister of Mines

Permanent head : Secretary for Mines

The Department is responsible for the administration of legislation relating to petroleum exploration and production, mining, quarrying, groundwater resources, gas regulation, explosives, liquefied gases, and inflammable liquids.

It is responsible for the survey and assessment of the State's mineral resources and the mapping of Victoria's geological structure. It provides technical services, information, and financial assistance to the mining industry. (For the history of the Department, see *Victorian Year Book* 1970, pages 105-8.)

Premier's Department

Minister : The Premier

Permanent head : Secretary to the Premier's Department

Within the Department some responsibility is delegated by the Premier to other Ministers.

The Department embraces within its organisation the Office of the Governor and the Executive Council. It acts as a channel of communication with other governments and is also responsible for the administration of, and for governmental contact with, the Office of the Agent-General in London. The functions performed by the Department extend over the whole area of the State and are administrative, regulatory, planning, developmental, and educational in character. (For the history of the Department, see *Victorian Year Book* 1964, pages 81-4.)

The various branches are : Audit, Agent-General, Office of the Executive Council and Office of the Governor, State Development, State Film Centre, Public Service Board, Ministry of Fuel and Power, National Parks Authority, and Soil Conservation Authority.

Public Works Department

Minister : Minister of Public Works

Permanent head : Director-General of Public Works

The Department's activities relate mainly to the construction, maintenance, supply, and furnishing of premises for departments, agencies, and government institutions, including schools. Although the various departments provide for the expenditure involved in their estimates and accounts, the actual responsibility for performing these functions lies with this Department, including purchase of the land and the plans and specifications.

The Department is also responsible for the shore protection works on the Victorian coast and the construction and maintenance of all Victorian ports, except the Ports of Melbourne, Geelong, and Portland. (For the history of the Department, see *Victorian Year Book* 1967, pages 98-100.)

Treasury

Minister : The Treasurer

Permanent head : Director of Finance

The Treasury is the State's central department of financial administration and control, and its prime functions relate to the raising of revenue and control over governmental expenditure within the ambit of Parliamentary authority. The Treasury co-ordinates government policy in so far as that policy has a financial aspect. (For the history of the Department, see *Victorian Year Book* 1966, pages 97-100.)

The various branches are : State Taxation, Stamps, Registry of Co-operative Housing Societies, Registry of Co-operative Societies, Registry of Estate Agents and Money Lenders, Government Printer, State Tender Board, State Superannuation Board, and Housing Commission.

Ministries

Ministry of Aboriginal Affairs

Minister : Minister of Aboriginal Affairs

Permanent head : Director of Aboriginal Affairs

Formerly a branch of the Chief Secretary's Department, the Ministry was created by Act of Parliament on 1 January 1968. The function of the Ministry of Aboriginal Affairs is to enable Aborigines to become independent by promoting their social and economic advancement. It works directly

with Aborigines to improve their living conditions, education, employment, and health and with the rest of the community to provide opportunities for progress. Ministry policy is decided in consultation with the Aboriginal people.

Ministry of Social Welfare

Minister: Minister for Social Welfare

Permanent head: Director-General of Social Welfare

Previously a branch of the Chief Secretary's Department, the Ministry was created in 1970. In addition to a central administration which is primarily responsible for the whole Ministry there are the following divisions: Family Welfare, Youth Welfare, Prisons, Probation and Parole, Training, and Research and Statistics. These are described in detail on page 524 and following of this *Year Book*.

Ministry of Tourism

Minister : Minister of Tourism

Permanent head : Director of Tourism

Previously a branch of the Premier's Department, the Ministry was created by the *Tourist Act* 1969 and became operative on 8 February 1970. Its function is to promote tourism in Victoria and encourage and assist the development of tourist attractions and facilities and provide an advisory service to travellers.

Ministry of Transport

Minister : Minister of Transport

Permanent head : Director of Transport

Created by the *Transport Act* 1951, this Ministry is concerned with the improvement, development, and better co-ordination of all rail, tram, road, and air transport in Victoria and, particularly, the operations of the Victorian Railways, Melbourne and Metropolitan Tramways Board, Railway Construction Board, and commercial freight and passenger transport through the Transport Regulation Board.

NOTE. The Ministry of Fuel and Power functions administratively as a branch of the Premier's Department.

Statutory authorities

The functions of the following public corporations are set out in the relevant sections of this *Victorian Year Book* :

Country Roads Board
Forests Commission
Gas and Fuel Corporation
Hospitals and Charities Commission
Housing Commission

Melbourne and Metropolitan Board of Works
Melbourne and Metropolitan Tramways Board
Railways Commissioners
State Electricity Commission
State Rivers and Water Supply Commission

Further reference, 1970

Government instrumentalities

The term "instrumentalities" is limited to statutory bodies which are not departments even though some are administered within or associated with departments.

The general features of the instrumentalities are constitution by Act of Parliament, a controlling Board or Commission appointed by the Governor in Council, freedom from direct ministerial control over day to day administration (but subject to governmental or ministerial control in matters

of major policy), and subject in some cases to the approval of the Governor in Council or the Minister, control over the appointment of staff and the determination of salaries and other conditions of employment. Financial arrangements differ considerably.

The largest of the instrumentalities are engaged in public utility or developmental fields of activity, for example, Victorian Railways Commissioners, State Electricity Commission, Melbourne and Metropolitan Tramways Board, and Country Roads Board.

Further reference, 1971

History of State Government Departments

A series of short, comprehensive histories of the State Government Departments has appeared in this part of previous editions of the *Victorian Year Book* since 1963. They have included the Chief Secretary's Department (1963), the Premier's Department (1964), the Law Department (1965), the Treasury (1966), the Public Works Department (1967), the Department of Crown Lands and Survey (1968), the Education Department (1969), the Mines Department (1970), and the Department of Agriculture (1971). The following article gives a brief history of local government and the Local Government Department.

History of local government

During the early period of settlement local government bodies varied greatly in their constitution and responsibilities, depending on local needs, resources and capabilities, and the central authority which advised and assisted them also changed frequently. An Act of the New South Wales Legislative Council in 1840 provided for the election of Road Trusts to maintain and repair roads in their areas. One such Trust was formed in the Heidelberg district and District Councils were also formed in the Counties of Bourke and Grant in 1843. The Heidelberg Trust had some success, but generally a lack of adequate local income prevented the others from doing much and Melbourne, constituted a town in 1842, and Geelong in 1849 (by an extension of the 1842 Act), were the only places capable of effective local government. They were given wide functions and powers, including a police force and the authority to construct waterworks, as well as many of the present powers of municipalities; an adequate revenue from rates was available to them to pay for their commitments.

Local government became more practicable after the separation of Victoria from New South Wales in 1850 and the increase of population resulting from the gold rush. By an Act of 1853 country areas, on a petition from local inhabitants, could be constituted as Road Districts with Boards elected by property holders. These Boards received grants from the Central Roads Board for the construction and repair of local roads, and raised revenue from rates and tolls. The Central Roads Board accepted most of the responsibility for the main roads, but the capacity of the Boards was limited, as they had no borrowing powers. Melbourne and Geelong were the first to be granted such powers, being authorised to borrow £500,000 and £200,000, respectively, in 1854.

In the same year, the Municipal Institutions Act provided for the constitution of Municipal Districts in areas of 9 square miles, with no less than 300 inhabitants, drawing revenue from rates and tolls and with

limited borrowing powers. Their resources were insufficient for their responsibilities, as they had the care of roads, streets, paths, wharves, jetties, piers and public thoroughfares and were required to provide cemeteries, preserve public health, undertake the care and maintenance of destitute persons, and to secure water supplies, lighting, drainage, and sewerage. They were permitted, if funds could be found, to establish libraries, museums, botanic gardens, and places of public recreation.

Only a few of the larger centres of population were able to make effective use of these powers. On the other hand, police and some smaller responsibilities had been assumed by the central government. In 1860 oversight of local councils was transferred to the Roads and Bridges Branch of the Board of Land and Works.

By the *Shires Act* 1863, Road Districts which had reached a higher degree of development and population could become Shires, with increased powers and authority. The Shires and Boroughs Statutes of 1869 extended their powers to street lighting, providing bathing houses, and establishing hospitals. The Municipal Districts, re-named Boroughs, were also given the responsibility for establishing markets and weighbridges and controlling offensive trades, and were offered the status of Town or City when they reached a further stage of development. At the same time local authorities lost part of their income by the abolition of tolls, except on ferries.

Supervision of local government bodies was exercised by the Railways and Roads Branch from 1872 to 1876, and by an Act of 1874 all existing Road Districts were incorporated as Shires, with the prevention of fires and the conduct of pounds and abattoirs added to the duties of local councils. Some of these powers had been exercised for some years without specific legislative sanction. In the same Act there was a set of model by-laws, which has become the basic model for local authorities.

Central government supervision of local bodies was transferred to the Local Government Branch of the Public Works Department in 1877, and it was kept busy dealing with requests for assistance in the making of main roads. By force of circumstances some of the responsibilities of local councils were transferred to other organisations. Water supply for Melbourne and suburbs had early been transferred to a separate authority and the Ports of Melbourne and Geelong became so active that Harbor Trusts were constituted for Melbourne in 1876 and for Geelong in 1905. Since then a Portland Harbor Trust was constituted in 1949. A Board of Public Health was set up in 1889 to exercise stricter control over health hazards, and prevention of fire was undertaken by the fire brigades boards, formed in 1890. Water supply in many places was provided from the reservoirs of the Victoria Water Supply established in 1865. However, local bodies retained many links with the harbour, health, fire brigade, and water supply authorities, usually by representation on the boards. In smaller ports, control was exercised by groups of municipalities; local councils acted as local agents of the Board of Health in maintaining standards of accommodation, ventilation of houses and workrooms, and removal of health hazards. The link with fire brigades was looser, but there was still municipal representation on the boards. Actual reticulation of water from reservoirs of the Victoria Water Supply, later the State Rivers and Water Supply

Commission, was frequently carried out by a water trust connected with the local council.

Special problems of the Melbourne area led to the establishment of the Melbourne and Metropolitan Board of Works in 1891 to control the water supply and sewerage for Melbourne and suburbs.

Technical developments led many councils into other activities, such as the production of gas and electricity, or they found themselves compelled to take control of privately owned works which became unpayable. Eventually most gas and all electricity production came into the hands of the Gas and Fuel Corporation and the State Electricity Commission, respectively, although some councils still buy power in bulk and retail it in their own areas.

Councils also had the right to construct and operate tramways, but they were glad to delegate this function to private companies. In Melbourne and the larger provincial towns the tramways were passenger carriers in the main streets; in the country, mainly carriers of timber or stone to mills. When companies failed passenger tramways came into the hands of the councils, and gradually passed into the control of the Melbourne and Metropolitan Tramways Board and State Electricity Commission, mostly in the early 1920s.

Changing conditions led the municipalities into the licensing of traction engines and control of road vehicles to prevent damage to roads, and some other minor matters, towards the end of the century. When main roads improved the main activity of local councils tended to be the construction of private streets as land was subdivided, regulation of traffic and conduct in public areas of towns, oversight of subdivisions of land for residential purposes, and regulation of building.

The development of motor cars produced a general parking problem, which was first officially noticed in 1946, when a new Act empowered councils to regulate the parking of motor cars. The same Act authorised them to set up housing schemes, but this power was not used, and as the Housing Commission undertook a great deal of building it has been little needed.

The many varied powers delegated or allowed to municipalities over the years have included the reclamation of low-lying land; regulating the use of landing grounds for aircraft, when provided by a municipality; aiding agricultural colleges and technical schools; making and supplying ice; supporting the establishment of charitable and medical institutions and local bands; demolition of ruinous buildings; and a wide range of miscellaneous activities.

In 1958 the Local Government Department was established to administer the Local Government Act, Melbourne and Metropolitan Board of Works Act, Town and Country Planning Act, and several other Acts. It supervises the municipal activities and provides subsidies and grants for a wide range of work which may be done by local authorities. The greatest activities of many councils now lie in town planning and a steady expansion of cultural, public health, social service, and public amenities such as libraries, sporting facilities, assistance to community groups, child and infant welfare centres, advisory services on personal problems, and club and recreational facilities for elderly people.

3

DEMOGRAPHY

POPULATION

Historical

According to manuscript notes made by Captain Lonsdale, the first enumeration of the people was taken by an officer from Sydney on 25 May 1836, less than one year after the date of the arrival of John Batman (29 May 1835). This was the first official census in Victoria, which was at that time known as the District of Port Phillip, and it disclosed that the band of first arrivals consisted of 142 males and 35 females of European origin.

At the Census taken in 1838 it was ascertained that the number of inhabitants had increased to 3,511. By the Census of 1851 the population had reached 77,345.

The discovery of gold in 1851 gave considerable impetus to the growth of population in Victoria. The intercensal increase in the decade 1851 to 1861 was 461,283. This increase, on a base population of 77,345, is noteworthy when compared with an increase of 767,185 on a base population of 2,452,341 in the twelve years from 1954 to 1966.

The 1850s and the 1950s represented the two outstanding periods of gain from migration into Victoria. An extended period of emigration from Victoria, mainly to Western Australia following discoveries of gold, was experienced between 1892 and 1907. In each of the years 1896, 1902, and 1903, due to the net loss from migration exceeding the gain from natural increase, a fall in total population was recorded. Falls were also recorded in 1915 and 1916, but these reflected embarkations on overseas service, which were taken into account in population estimates during the First World War.

Following the Second World War, coinciding with the generally increased level of migration, natural increase maintained a higher level than during the great economic depression of the late 1920s and early 1930s, but did not attain the yet higher levels characteristic of the earlier years of settlement. In Victoria natural increase figures decreased each year from 1961 to 1966, but increased in 1967, 1968, 1969, and 1970.

The estimated population of Victoria at the end of 1970 was 3,480,833.

Preliminary results from the 1971 Census are contained in Appendix C of this *Year Book*.

Census populations 1933 to 1966

The following table shows the census populations, excluding Aborigines, of Australian States from 1933 to 1966 :

AUSTRALIA—CENSUS POPULATIONS OF STATES AND TERRITORIES

State or Territory	Population at Census of—				
	1933	1947	1954	1961	1966
New South Wales	2,600,847	2,984,838	3,423,529	3,917,013	4,233,822
Victoria	1,820,261	2,054,701	2,452,341	2,930,113	3,219,526
Queensland	947,534	1,106,415	1,318,259	1,518,828	1,663,685
South Australia	580,949	646,073	797,094	969,340	1,091,875
Western Australia	438,852	502,480	639,771	736,629	836,673
Tasmania	227,599	257,078	308,752	350,340	371,435
Northern Territory	4,850	10,868	16,469	27,095	37,433
Australian Capital Territory	8,947	16,905	30,315	58,828	96,013
Australia	6,629,839	7,579,358	8,986,530	10,508,186	11,550,462

Details of the average annual rate of increase of population in each State and Territory and in Australia during intercensal periods from 1933 to 1966 are given below:

AUSTRALIA—AVERAGE ANNUAL RATE OF INCREASE OF POPULATION DURING INTERCENSAL PERIODS

(per cent)

State or Territory	Intercensal period			
	1933–1947	1947–1954	1954–1961	1961–1966
New South Wales	0.99	1.98	1.94	1.57
Victoria	0.87	2.56	2.58	1.90
Queensland	1.11	2.53	2.04	1.84
South Australia	0.76	3.05	2.83	2.41
Western Australia	0.97	3.51	2.03	2.58
Tasmania	0.87	2.65	1.82	1.18
Northern Territory	5.93	6.12	7.37	6.68
Australian Capital Territory	4.65	8.70	9.94	10.29
Australia	0.96	2.46	2.26	1.91

Numbers and rates of natural increase, i.e., excess of births over deaths in each State and Territory, between 1931 and 1970 are given in the following tables :

AUSTRALIA—NATURAL INCREASE

Period	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
ANNUAL AVERAGES									
1931-1940 (a)	22,159	10,811	9,880	3,716	4,396	2,438	32	138	53,570
1941-1950 (a)	34,041	21,292	15,681	8,003	7,006	3,768	131	472	90,394
1951-1960	43,607	33,948	20,980	11,554	10,930	5,523	468	946	127,956
1961-1970	43,346	39,057	20,725	12,366	11,512	5,124	1,129	1,964	135,223
ANNUAL TOTALS									
1966	37,212	35,335	17,982	10,996	10,235	4,242	818	1,877	118,697
1967	39,228	37,112	19,956	11,315	11,244	4,319	1,394	2,025	126,593
1968	39,893	40,261	19,112	11,291	12,073	5,033	1,541	2,155	131,359
1969	45,371	42,059	20,790	12,640	13,404	5,136	1,789	2,491	143,680
1970	44,847	42,684	20,475	12,479	14,075	5,011	2,016	2,881	144,468

(a) For the period September 1939 to June 1947 natural increase was calculated as the excess of births over civilian deaths.

AUSTRALIA—NATURAL INCREASE PER 1,000 OF THE MEAN POPULATION

Period	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
ANNUAL AVERAGES									
1931-1940 (a)	8.32	5.87	10.14	6.33	9.74	10.50	5.73	(b)13.18	7.92
1941-1950 (a)	11.53	10.45	14.35	12.50	14.02	14.83	11.86	(b)28.03	12.04
1951-1960	12.32	13.20	15.55	13.81	16.50	17.23	26.49	(b)26.63	13.71
1961-1970	10.30	12.25	12.55	11.58	13.61	13.84	23.97	21.06	11.79
ANNUAL TOTALS (c)									
1966	8.78	10.97	10.81	10.07	12.22	11.41	21.78	19.45	10.27
1967	9.10	11.32	11.72	10.18	12.82	11.47	23.36	19.52	10.71
1968	9.09	12.10	11.02	10.03	13.27	13.17	23.97	19.11	10.91
1969	10.13	12.42	11.75	10.88	14.15	13.22	26.23	20.38	11.67
1970	9.80	12.37	11.36	10.71	14.32	12.75	28.05	21.59	11.49

(a) For the period September 1939 to June 1947 natural increase was calculated as the excess of births over civilian deaths.

(b) Rates affected by special local features.

(c) Rates from 1966 onwards are subject to revision.

The growth which has taken place in Victoria since the 1930s is evidenced by the fact that during the 33 years from 1933 to 1966 the increase in population was 1,399,265 compared with an increase of 619,191 over the period of 32 years from 1901 to 1933, representing a percentage increase of 76.87 per cent and 51.55 per cent on the respective base populations.

Between 1947 and 1966 Victoria's population increased by 1,164,825. Of this increase 501,998 (43.1 per cent) were born overseas, mainly in the United Kingdom and the Republic of Ireland, Italy, Greece, Malta, Germany, and the Netherlands. In 1966, 32 per cent of Australia's overseas born population lived in Victoria and 21 per cent of the State's population was overseas born.

The population of Victoria at each Census from 1901 to 1966, and the numerical and percentage increase during each intercensal period, are shown in the following table:

VICTORIA—POPULATION

Year of Census	Persons			Males			Females		
	Population	Intercensal increase		Population	Intercensal increase		Population	Intercensal increase	
		Numerical	Percentage		Numerical	Percentage		Numerical	Percentage
1901	1,201,070	(a)60,982	(a)5.35	603,720	(a)5,498	(a)0.92	597,350	(a)55,484	(a)10.24
1911	1,315,551	114,481	9.53	655,591	51,871	8.59	659,960	62,610	10.48
1921	1,531,280	215,729	16.40	754,724	99,133	15.12	776,556	116,596	17.67
1933	1,820,261	288,981	18.87	903,244	148,520	19.68	917,017	140,461	18.09
1947	2,054,701	234,440	12.88	1,013,867	110,623	12.25	1,040,834	123,817	13.50
1954	2,452,341	397,640	19.35	1,231,099	217,232	21.43	1,221,242	180,408	17.33
1961	2,930,113	477,772	19.48	1,474,395	243,296	19.76	1,455,718	234,476	19.20
1966	3,219,526	289,413	9.88	1,613,904	139,509	9.46	1,605,622	149,904	10.30

(a) Since 1891.

The populations of Australian capital cities at each Census, 1933 to 1966, are shown in the following table :

AUSTRALIA—POPULATIONS OF CAPITAL CITIES (a)

Metropolitan Area	Population at Census of—				
	1933	1947	1954	1961	1966
Sydney	1,235,267	1,484,004	1,863,161	2,197,022	2,446,345
Melbourne	991,934	1,226,409	1,524,111	1,858,534	2,110,168
Brisbane	299,748	402,030	502,320	587,634	718,822
Adelaide	312,619	382,454	483,508	580,449	727,916
Perth	207,440	272,528	348,647	423,930	499,969
Hobart	60,406	76,534	95,206	110,217	119,469
Canberra	7,325	15,156	28,277	55,746	92,308
Total	3,114,739	3,859,115	4,845,230	5,813,532	6,714,997
Percentage of Australia	47	51	54	55	58

(a) Some of the apparent increase in the percentage of total population living in capital cities is due to periodic revision and extension of metropolitan boundaries ; in particular the 1966 Census figures have been based on the "Linge concepts" explained on page 117. Figures for 1961 in the above table have been revised in accordance with these concepts.

Sydney has been the most populous city in Australia since 1902. However, the absolute increase in population in Melbourne over the period 1954 to 1966 has slightly exceeded the increase in Sydney over the same period.

An analysis of intercensal increases in the population of Victoria between 1933 and 1966 is made in the following table :

VICTORIA—ANALYSIS OF INTERCENSAL INCREASES IN POPULATION

Intercensal period	Population at end of period	Total increase	Natural increase	Net migration (a)
1933 to 1947	2,054,701	234,440	192,260	42,180
1947 to 1954	2,452,341	397,640	192,741	204,899
1954 to 1961	2,930,113	477,772	256,420	221,352
1961 to 1966	3,219,526	289,413	189,372	100,041

(a) Net intercensal gain after deducting natural increase from total increase.

For purposes of the 1966 Census (see page 117), the Melbourne Statistical Division and Melbourne Metropolitan Area, previously conterminous, became separate entities. The boundary of the Melbourne Metropolitan Area, located within the long term Melbourne Statistical Division, shows the limits of urban development about the capital city at Census dates. Simultaneously with the defining of the Melbourne Statistical Division the former Central Statistical Division became reduced and divided, and the two parts were named the West Central Statistical Division and East Central Statistical Division, respectively. The boundaries of these new Statistical Divisions are shown in a map of Victoria to be found in the pocket inside the back cover of this *Victorian Year Book*.

VICTORIA—POPULATION IN STATISTICAL DIVISIONS

Statistical Division	Census (a)				
	1933	1947	1954	1961	1966
Melbourne	1,094,269	1,341,382	1,589,185	1,984,815	2,230,580
West Central	76,345	82,739	107,163	129,843	147,684
North Central	58,860	54,780	67,657	63,085	64,124
Western	158,374	159,368	180,051	198,022	203,350
Wimmera	61,131	54,171	57,686	58,799	59,989
Mallee	63,404	52,770	58,070	62,952	64,967
Northern	128,766	121,674	139,977	156,364	167,280
North Eastern	59,736	60,160	78,770	86,406	86,711
Gippsland	83,905	91,400	128,531	149,051	155,556
East Central	33,893	32,406	37,210	36,167	36,297
Migratory	1,578	3,851	8,041	4,609	2,988
Total	1,820,261	2,054,701	2,452,341	2,930,113	3,219,526

(a) Figures from 1933 to 1961 have been adjusted to show population in Statistical Divisions as defined for the Census 30 June 1966. Figures for Melbourne and East Central Statistical Divisions for 1933, 1947, and 1954 have been estimated.

VICTORIA—COMPONENTS OF INTERCENSAL CHANGES IN POPULATIONS OF STATISTICAL DIVISIONS, CENSUSES 1954 TO 1966

Statistical Division	Population at Census 1954	1954-1961		Population at Census 1961	1961-1966		Population at Census 1966
		Natural increase	Net migration (a)		Natural increase	Net migration (a)	
Melbourne	1,589,185	(b)167,209	(b)250,058	1,984,815	122,554	123,211	2,230,580
West Central	107,163	(c)	(c)	129,843	9,022	8,819	147,684
North Central	67,657	5,587	— 10,159	63,085	3,215	— 2,176	64,124
Western	180,051	20,738	— 2,767	198,022	12,537	— 7,209	203,350
Wimmera	57,686	6,388	— 5,275	58,799	3,892	— 2,702	59,989
Mallee	58,070	10,044	— 5,162	62,952	6,460	— 4,445	64,967
Northern	139,977	17,680	— 1,293	156,364	12,011	— 1,095	167,280
North Eastern	78,770	8,290	— 654	86,406	5,189	— 4,884	86,711
Gippsland	128,531	20,484	36	149,051	12,323	— 5,818	155,556
East Central	37,210	(c)	(c)	36,167	2,169	— 2,039	36,297
Migratory	8,041	..	— 3,432	4,609	..	— 1,621	2,988
Total	2,452,341	256,420	221,352	2,930,113	189,372	100,041	3,219,526

NOTE. In the above table, populations of statistical divisions in 1954 and 1961 have been adjusted to conform with boundaries as defined at the 1966 Census. Figures shown for natural increase in the Melbourne, West Central, and East Central Statistical Divisions have been estimated. As changes affecting the North Central and Northern Statistical Divisions had only a slight effect on population, figures of components of increase for these divisions have been shown without adjustment.

Minus (—) sign denotes decrease.

(a) Total increase less natural increase.

(b) Figures for Melbourne, West Central, and East Central Statistical Divisions. Separate figures not available.

(c) See note to Melbourne Statistical Division.

In the above table "net migration" is considered to be the net intercensal gain or loss of population after deducting natural increase.

Population of the Melbourne Statistical Division and remainder of the State

The figures in the following table have been re-calculated on the basis of the boundary of the Melbourne Statistical Division as determined at the 1966 Census. The table shows that as early as the 1921 Census the population of the Melbourne Statistical Division exceeded that of the rest of the State.

VICTORIA—POPULATION OF VICTORIA, MELBOURNE STATISTICAL DIVISION, AND REMAINDER OF THE STATE

Census year	Victoria	Melbourne Statistical Division (a)		Remainder of State	
		Number	Percentage of Victoria	Number	Percentage of Victoria
1901	1,201,070	535,008	44.54	666,062	55.46
1911	1,315,551	643,027	48.88	672,524	51.12
1921	1,531,280	863,692	56.40	667,588	43.60
1933	1,820,261	1,094,269	60.12	725,992	39.88
1947	2,054,701	1,341,382	65.28	713,319	34.72
1954	2,452,341	1,589,185	64.80	863,156	35.20
1961	2,930,113	1,984,815	67.74	945,298	32.26
1966	3,219,526	2,230,580	69.28	988,946	30.72

(a) Area as defined for Census, 30 June 1966.

Ages of the population

VICTORIA—AGES (a) OF THE POPULATION : PERCENTAGE INTERCENSAL INCREASES, 1947 TO 1966

Age group (years)	Population at Census				Percentage increase		
	1947	1954	1961	1966	1947-1954	1954-1961	1961-1966
0-4	197,239	258,335	307,532	320,581	30.98	19.04	4.24
5-9	154,111	238,857	288,770	320,587	54.99	20.90	11.02
10-14	135,393	180,807	277,854	298,725	33.54	53.67	7.51
15-19	151,994	153,721	219,365	289,716	1.14	42.70	32.07
20-24	165,883	160,930	195,076	237,896	-2.99	21.22	21.95
25-29	159,483	194,470	186,724	209,731	21.94	-3.98	12.32
30-34	160,325	195,595	209,542	194,382	22.00	7.13	-7.24
35-39	151,734	173,694	217,856	216,297	14.47	25.43	-0.72
40-44	139,302	172,584	187,624	217,853	23.89	8.71	16.11
45-49	133,002	152,358	181,826	186,125	14.55	19.34	2.36
50-54	122,875	137,512	158,846	176,845	11.91	15.51	11.33
55-59	112,040	114,856	131,730	150,817	2.51	14.69	14.49
60-64	89,379	108,442	115,027	122,989	21.33	6.07	6.92
65-69	68,608	83,158	95,755	100,326	21.21	15.15	4.77
70-74	49,523	58,227	73,610	78,660	17.58	26.42	6.86
75-79	35,129	36,970	45,364	54,474	5.24	22.70	20.08
80-84	19,569	20,454	24,232	28,078	4.52	18.47	15.87
85-89	7,397	8,733	10,080	11,546	18.06	15.42	14.54
90-94	1,505	2,346	2,809	3,269	55.88	19.74	16.38
95-99	199	276	451	582	38.69	63.41	29.05
100 and over	11	16	40	47	45.45	150.00	17.50
Total	2,054,701	2,452,341	2,930,113	3,219,526	19.35	19.48	9.88
Under 21	670,448	861,456	1,133,379	1,280,838	28.49	31.57	13.01
21-64	1,202,312	1,380,705	1,544,393	1,661,706	14.84	11.86	7.60
65 and over	181,941	210,180	252,341	276,982	15.52	20.06	9.76

(a) Recorded ages, adjusted by distribution of unspecified ages.
Minus (—) sign denotes decrease.

The age distribution of the population has shown considerable change between 1933 and 1966. Most notable is the growth of the under 21 years group.

VICTORIA—PROPORTIONS OF POPULATION IN AGE GROUPS (a)
(per cent)

Age last birthday (years)	Census				
	1933	1947	1954	1961	1966
0-4	7.94	9.60	10.53	10.50	9.96
5-9	9.01	7.50	9.74	9.85	9.96
10-14	8.99	6.59	7.37	9.48	9.28
15-19	8.85	7.40	6.27	7.49	9.00
20-24	8.53	8.07	6.56	6.66	7.39
25-29	8.01	7.76	7.93	6.37	6.51
30-34	7.58	7.80	7.98	7.15	6.04
35-39	7.29	7.39	7.08	7.43	6.72
40-44	7.05	6.78	7.04	6.40	6.77
45-49	6.08	6.47	6.21	6.20	5.78
50-54	5.08	5.98	5.61	5.42	5.49
55-59	4.15	5.45	4.68	4.50	4.68
60-64	3.88	4.35	4.42	3.93	3.82
65-69	3.29	3.34	3.39	3.27	3.12
70-74	2.35	2.41	2.38	2.51	2.44
75-79	1.23	1.71	1.51	1.55	1.69
80-84	0.46	0.95	0.83	0.83	0.87
85-89	0.18	0.36	0.36	0.34	0.36
90 and over	0.05	0.09	0.11	0.12	0.12
All ages	100.00	100.00	100.00	100.00	100.00
Under 21	36.57	32.63	35.13	38.68	39.79
21-64	55.87	58.57	56.30	52.71	51.61
65 and over	7.56	8.80	8.57	8.61	8.60

(a) Recorded ages adjusted by distribution of unspecified ages.

VICTORIA—MASCULINITY (a) OF POPULATION IN AGE GROUPS (b)

Age last birthday (years)	1933	1947	1954	1961	1966
0-4	104.11	104.59	104.78	105.02	105.11
5-9	104.32	104.07	104.76	105.43	105.02
10-14	103.59	103.13	104.00	104.70	105.30
15-19	101.66	101.93	105.11	105.38	104.31
20-24	100.97	98.04	108.47	106.81	102.55
25-29	103.75	97.47	108.93	108.48	105.65
30-34	101.93	97.11	105.66	110.07	107.07
35-39	92.44	100.75	102.26	105.67	108.37
40-44	94.34	105.25	105.37	102.83	104.26
45-49	96.03	99.81	107.60	103.42	102.15
50-54	95.49	92.13	102.83	104.90	100.88
55-59	92.26	93.81	92.01	102.96	102.16
60-64	88.53	89.07	85.99	88.45	96.54
65-69	92.07	84.45	83.43	77.79	80.03
70-74	90.60	77.44	75.41	73.81	68.62
75-79	87.39	75.56	68.96	66.56	63.31
80-84	72.66	72.51	62.29	58.24	54.66
85-89	62.61	64.41	59.77	51.28	46.45
90-94	57.20	56.93	50.10	47.76	39.88
95-99	39.13	50.76	35.29	37.50	33.79
100 and over	33.33	10.00	33.33	25.00	17.50
All ages	98.50	97.41	100.81	101.28	100.52

(a) Number of males per 100 females.

(b) Recorded ages adjusted by distribution of unspecified ages.

Census 1966

VICTORIA—AGE DISTRIBUTION OF THE POPULATION

Age last birthday (years)	Census 1961			Census 1966			Increase in persons 1961 to 1966
	Males	Females	Persons	Males	Females	Persons	
0-4	157,534	149,998	307,532	164,283	156,298	320,581	13,049
5-9	148,199	140,571	288,770	164,216	156,371	320,587	31,817
10-14	142,119	135,735	277,854	153,220	145,505	298,725	20,871
15-19	112,556	106,809	219,365	147,914	141,802	289,716	70,351
20-24	100,750	94,326	195,076	120,447	117,449	237,896	42,820
25-29	97,160	89,564	186,724	107,745	101,986	209,731	23,007
30-34	109,792	99,750	209,542	100,508	93,874	194,382	— 15,160
35-39	111,929	105,927	217,856	112,493	103,804	216,297	— 1,559
40-44	95,120	92,504	187,624	111,196	106,657	217,853	30,229
45-49	92,443	89,383	181,826	94,051	92,074	186,125	4,299
50-54	81,322	77,524	158,846	88,808	88,037	176,845	17,999
55-59	66,826	64,904	131,730	76,214	74,603	150,817	19,087
60-64	53,988	61,039	115,027	60,411	62,578	122,989	7,962
65-69	41,897	53,858	95,755	44,600	55,726	100,326	4,571
70-74	31,258	42,352	73,610	32,010	46,650	78,660	5,050
75-79	18,127	27,237	45,364	21,117	33,357	54,474	9,110
80-84	8,919	15,313	24,232	9,923	18,155	28,078	3,846
85-89	3,417	6,663	10,080	3,662	7,884	11,546	1,466
90-94	908	1,901	2,809	932	2,337	3,269	460
95-99	123	328	451	147	435	582	131
100 and over	8	32	40	7	40	47	7
Total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526	289,413
Under 21	581,042	552,337	1,133,379	655,694	625,144	1,280,838	147,459
21-64	788,696	755,697	1,544,393	845,812	815,894	1,661,706	117,313
65 and over	104,657	147,684	252,341	112,398	164,584	276,982	24,641
Total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526	289,413

Minus (—) sign denotes decrease.

VICTORIA—NATIONALITY OF THE POPULATION

Nationality	Census 1961			Census 1966		
	Males	Females	Persons	Males	Females	Persons
British (a)—						
Born in Australia	1,161,006	1,199,417	2,360,423	1,249,368	1,289,560	2,538,928
Born outside Australia	198,484	165,744	364,228	255,273	219,718	474,991
Total British	1,359,490	1,365,161	2,724,651	1,504,641	1,509,278	3,013,919
Foreign—						
Austrian	3,000	2,069	5,069	1,941	1,438	3,379
Dutch	15,091	12,540	27,631	8,655	7,394	16,049
German	13,448	10,456	23,904	8,529	6,903	15,432
Greek	14,705	13,449	28,154	26,104	27,337	53,441
Hungarian	3,120	2,317	5,437	1,230	949	2,179
Italian	37,507	30,821	68,328	37,499	34,030	71,529
Polish	4,538	3,629	8,167	2,838	2,414	5,252
Russian(b)	1,448	1,215	2,663	1,102	922	2,024
Spanish	490	300	790	1,536	1,269	2,805
U.S. American	1,427	976	2,403	1,790	1,265	3,055
Yugoslav	6,570	3,823	10,393	8,029	5,678	13,707
Other (including stateless)	13,561	8,962	22,523	10,010	6,745	16,755
Total foreign	114,905	90,557	205,462	109,263	96,344	205,607
Grand total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526

(a) All persons of individual citizenship status who by virtue of the *Nationality and Citizenship Act 1948* are deemed to be British subjects. For purposes of this table Irish nationality is included with British.

(b) Includes Ukrainian.

VICTORIA—BIRTHPLACE OF THE POPULATION

Birthplace	Census 1961			Census 1966		
	Males	Females	Persons	Males	Females	Persons
Australia	1,161,006	1,199,417	2,360,423	1,249,368	1,289,560	2,538,928
New Zealand	5,624	5,852	11,476	5,738	5,945	11,683
Europe—						
United Kingdom and						
Republic of Ireland	108,693	97,676	206,369	124,415	114,991	239,406
Germany	20,723	18,568	39,291	18,982	18,288	37,270
Greece	17,246	14,517	31,763	32,884	31,391	64,275
Italy	52,110	38,965	91,075	61,091	50,128	111,219
Malta	10,216	7,628	17,844	14,804	11,648	26,452
Netherlands	20,201	16,083	36,284	19,092	15,554	34,646
Poland	13,807	9,988	23,795	13,986	10,711	24,697
Yugoslavia	10,867	6,351	17,218	14,574	10,060	24,634
Other	32,037	23,950	55,987	31,082	24,496	55,578
Total Europe	285,900	233,726	519,626	330,910	287,267	618,177
Other birthplaces	21,865	16,723	38,588	27,888	22,850	50,738
Grand total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526

VICTORIA—PERIOD OF RESIDENCE IN AUSTRALIA OF PERSONS WHO WERE BORN OUTSIDE AUSTRALIA

Number of completed years of residence	Census 1961			Census 1966		
	Males	Females	Persons	Males	Females	Persons
Under 1	24,855	17,313	42,168	24,474	21,213	45,687
1	16,376	13,499	29,875	20,061	17,973	38,034
2	16,279	15,451	31,730	19,153	17,784	36,937
3	13,428	15,442	28,870	15,352	14,184	29,536
4	15,079	15,672	30,751	11,349	12,884	24,233
Under 5	86,017	77,377	163,394	90,389	84,038	174,427
5 and under 12	221,386	173,906	395,292	104,277	96,881	201,158
12 and over				161,959	128,470	290,429
Not stated	5,986	5,018	11,004	7,911	6,673	14,584
Born outside Australia	313,389	256,301	569,690	364,536	316,062	680,598
Born in Australia	1,161,006	1,199,417	2,360,423	1,249,368	1,289,560	2,538,928
Total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526

VICTORIA—MARITAL STATUS OF POPULATION

Marital status	Census 1961			Census 1966		
	Males	Females	Persons	Males	Females	Persons
Never married—						
Under fifteen years of age	447,852	426,304	874,156	481,719	458,174	939,893
Fifteen years of age and over	303,290	222,756	526,046	344,297	260,301	604,598
Total never married	751,142	649,060	1,400,202	826,016	718,475	1,544,491
Married	664,992	660,473	1,325,465	725,320	722,266	1,447,586
Married but permanently separated	18,302	21,927	40,229	19,938	24,134	44,072
Widowed	31,497	113,940	145,437	32,875	128,311	161,186
Divorced	8,462	10,318	18,780	9,755	12,436	22,191
Total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526

VICTORIA—RELIGION OF THE POPULATION

Religion	Census 1961			Census 1966		
	Males	Females	Persons	Males	Females	Persons
Christian—						
Baptist	18,225	20,402	38,627	19,469	21,950	41,419
Brethren	1,558	1,799	3,357	1,605	1,741	3,346
Catholic, Roman(a)	134,536	116,287	250,823	134,108	119,839	253,947
Catholic(a)	254,236	257,676	511,912	314,704	320,844	635,548
Church of England	443,023	450,136	893,159	455,772	467,306	923,078
Churches of Christ	17,883	20,056	37,939	18,560	20,703	39,263
Congregational	5,552	6,552	12,104	5,394	6,426	11,820
Lutheran	18,267	17,101	35,368	19,052	18,585	37,637
Methodist	134,040	141,165	275,205	135,296	144,004	279,300
Orthodox	29,759	25,064	54,823	52,279	48,108	100,387
Presbyterian	179,466	187,880	367,346	188,067	199,041	387,108
Protestant, undefined	20,348	19,592	39,940	22,046	22,410	44,456
Salvation Army	6,323	7,274	13,597	6,954	7,796	14,750
Seventh-day Adventist	2,560	3,161	5,721	3,220	3,929	7,149
Other	11,858	13,032	24,890	16,554	17,339	33,893
Total Christian	1,277,634	1,287,177	2,564,811	1,393,080	1,420,021	2,813,101
Non-Christian—						
Hebrew	14,993	14,939	29,932	15,456	15,602	31,058
Other	1,962	911	2,873	2,699	1,491	4,190
Total non-Christian	16,955	15,850	32,805	18,155	17,093	35,248
Indefinite	3,637	3,014	6,651	5,078	4,400	9,478
No religion	7,081	3,715	10,796	17,569	10,396	27,965
No reply	169,088	145,962	315,050	180,022	153,712	333,734
Grand total	1,474,395	1,455,718	2,930,113	1,613,904	1,605,622	3,219,526

(a) So described on individual census schedules.

VICTORIA—INDUSTRY OF THE POPULATION

Industry group	Census 1966			Percentage of work force		
	Males	Females	Persons	Males	Females	Persons
Primary production	92,791	19,179	111,970	9.76	4.49	8.13
Mining and quarrying	4,799	400	5,199	0.51	0.09	0.38
Manufacturing	311,680	126,810	438,490	32.80	29.71	31.84
Electricity, gas, water and sanitary services (production, supply, and maintenance)	31,416	2,383	33,799	3.30	0.56	2.45
Building and construction	104,783	1,093	108,876	11.03	0.96	7.91
Transport and storage and communication	86,104	13,077	99,181	9.06	3.06	7.20
Finance and property	30,219	20,520	50,739	3.18	4.81	3.68
Commerce	135,139	81,352	216,491	14.22	19.06	15.72
Public authority (n.e.i.) and defence services	41,964	11,254	53,218	4.42	2.64	3.87
Community and business services (incl. professional) (a)	65,087	88,322	153,409	6.85	20.69	11.14
Amusements, hotels and other accommodation, cafés, personal service, etc.	34,444	46,077	80,521	3.62	10.80	5.85
Other industries and industry inadequately described or not stated	11,801	13,354	25,155	1.25	3.13	1.83
Total in work force	950,227	426,821	1,377,048	100.00	100.00	100.00
Persons not in work force	663,677	1,178,801	1,842,478	..	..	..
Grand total	1 613,904	1,605,622	3,219,526	..	..	..

(a) Includes police, fire brigades, hospitals, medical and dental services, education, and business services such as consultant engineering and surveying, accountancy and auditing, industrial and trade associations, advertising, etc.

The preceding table showed the industries in which persons were engaged at the time of the Census. Population has also been classified according to the actual occupation carried on by each person, and in the following table the numbers in broad groups of these occupations are shown :

VICTORIA—OCCUPATIONS OF THE POPULATION IN MAJOR GROUPS

Occupation group	Census 1966			Percentage of work force		
	Males	Females	Persons	Males	Females	Persons
Professional, technical, and related workers	76,622	54,301	130,923	8.06	12.72	9.51
Administrative, executive and managerial workers	79,074	10,584	89,658	8.32	2.48	6.51
Clerical workers	80,828	122,898	203,726	8.51	28.79	14.80
Sales workers	57,441	48,045	105,486	6.04	11.26	7.66
Farmers, fishermen, hunters, timber getters, and related workers	98,112	18,728	116,840	10.33	4.38	8.49
Miners, quarrymen, and related workers	2,376	2	2,378	0.25	0.01	0.17
Workers in transport and communication operations	66,693	9,352	76,045	7.02	2.19	5.52
Craftsmen, production process workers and labourers (not elsewhere classified)	428,287	93,502	521,789	45.07	21.90	37.89
Service, sport and recreation workers	38,505	57,103	95,608	4.05	13.38	6.94
Members of armed forces, enlisted personnel	14,530	725	15,255	1.53	0.17	1.11
Occupation inadequately described or not stated	7,759	11,581	19,340	0.82	2.72	1.40
Total persons in the work force	950,227	426,821	1,377,048	100.00	100.00	100.00
Persons not in the work force	663,677	1,178,801	1,842,478	..	..	..
Grand total	1,613,904	1,605,622	3,219,526	..	..	..

VICTORIA—OCCUPATIONAL STATUS OF THE POPULATION

Occupational status	Census 1966			Percentage of population		
	Males	Females	Persons	Males	Females	Persons
IN WORK FORCE—						
Employed—						
Employer	67,236	16,747	83,983	4.16	1.04	2.61
Self-employed	92,302	20,008	112,310	5.72	1.25	3.49
Employee	777,217	374,625	1,151,842	48.16	23.33	35.77
Helper (not on wage or salary)	3,333	8,191	11,524	0.21	0.51	0.36
Total employed	940,088	419,571	1,359,659	58.25	26.13	42.23
Unemployed(a)	10,139	7,250	17,389	0.63	0.45	0.54
Total in work force	950,227	426,821	1,377,048	58.88	26.58	42.77
NOT IN WORK FORCE—						
Child not attending school	167,858	159,767	327,625	10.40	9.95	10.17
Full-time student or child attending school	376,213	345,855	722,068	23.31	21.54	22.43
Independent means, including "Retired" (so described)	14,602	17,544	32,146	0.91	1.09	1.00
Home duties	..	508,249	508,249	..	31.66	15.79
Pensioner or annuitant	72,213	117,975	190,188	4.47	7.35	5.91
Inmate of institution	10,402	11,867	22,269	0.64	0.74	0.69
Other	22,389	17,544	39,933	1.39	1.09	1.24
Total not in work force	663,677	1,178,801	1,842,478	41.12	73.42	57.23
Grand total	1,613,904	1,605,622	3,219,526	100.00	100.00	100.00

(a) At the 1966 Census this category was restricted to persons actively looking for work, i.e., (1) registered with Commonwealth Employment Service or (2) approaching prospective employers or (3) placing or answering advertisements or (4) writing letters of application or (5) awaiting the result of recent applications.

VICTORIA—POPULATION BY EDUCATIONAL ATTAINMENT

Highest level of education attained	Census 1966			Percentage of population		
	Males	Females	Persons	Males	Females	Persons
Tertiary—						
University	25,385	8,467	33,852	1.57	0.53	1.05
Other tertiary qualifications	40,149	29,031	69,180	2.49	1.81	2.15
Secondary—						
Passed Leaving or Matriculation	147,237	129,937	277,174	9.12	8.09	8.61
Passed Intermediate	208,282	208,183	416,465	12.91	12.96	12.94
Attended secondary school(a)	394,502	381,174	775,676	24.44	23.74	24.09
Primary—						
Attended primary school(b)	588,593	643,663	1,232,256	36.47	40.09	38.27
No schooling	176,230	169,419	345,649	10.92	10.55	10.74
No reply	33,526	35,748	69,274	2.08	2.23	2.15
Total	1,613,904	1,605,622	3,219,526	100.00	100.00	100.00

(a) Passed no examination at Intermediate level or above.

(b) Or passed final primary examinations.

Delimitation of urban boundaries

The concepts applied to the 1966 Census in delimiting urban boundaries were adopted by the Statisticians Conference in August 1965 and follow closely a set of recommendations made by Dr G. J. R. Linge of the Australian National University after a study of methods used in other countries.

For the purpose of presenting population and dwelling statistics obtained at the Census of 30 June 1966 the new concepts have been used for the delimitation of the boundaries of the Melbourne Metropolitan Area and certain other urban centres.

Around each capital city and each town with a population of 75,000 or more *two* boundaries have been drawn.

The *outer* boundary, which is fixed, circumscribes the area in close economic and social contact with the main city or town. These areas are designated Statistical Divisions or Statistical Districts. Thus in Victoria there is the Melbourne Statistical Division and the Geelong Statistical District.

The *inner* boundary indicates the area within which, at the time of the census, there was a density of at least 500 persons per square mile. This density is determined for each Census Collector's District (the smallest geographical area available). From census to census, as urbanisation proceeds, this inner boundary will move outwards to encompass peripheral development. Some specified areas of lower density (e.g., industrial areas) are classified as urban on other grounds.

The principal urban centre within the Melbourne Statistical Division has been designated the Melbourne Metropolitan Area. Outside the Melbourne Metropolitan Area population clusters of 1,000 or more persons, having a minimum density of 500 persons per square mile, have been designated urban centres. Because of practical difficulties the new criteria have at present been uniformly applied only to urban centres within the Melbourne Statistical Division, to the Geelong Statistical District, to urban centres in Victoria with a population of 30,000 or more, and to the Moe-Yallourn Urban Centre. It is proposed to extend the application of the new criteria to smaller centres in future censuses.

The results of the 1966 Census showed Victoria's population had increased 56.7 per cent since 1947, to reach 3,219,526, which is 28 per cent of the Australian population.

Victoria's density of 37 persons per square mile is considerably higher than the Australian average of 3.9 persons per square mile. However, the population is unevenly distributed throughout the State, as is shown by the table below :

VICTORIA—PERCENTAGE OF AREA IN STATISTICAL DIVISIONS AND POPULATION IN STATISTICAL DIVISIONS, CENSUS 30 JUNE 1966

Statistical Division	Per cent area of State	Males	Females	Persons	Per cent population of State	Persons to the square mile
Melbourne	2.80	1,108,020	1,122,560	2,230,580	69.28	941.87
West Central	2.71	74,813	72,871	147,684	4.59	61.98
North Central	5.28	33,303	30,821	64,124	1.99	13.83
Western	16.28	102,091	101,259	203,350	6.32	14.22
Wimmera	13.89	30,342	29,647	59,989	1.86	4.91
Mallee	16.35	33,447	31,520	64,967	2.02	4.52
Northern	11.58	84,553	82,727	167,280	5.20	16.44
North Eastern	13.90	45,252	41,459	86,711	2.69	7.09
Gippsland	15.24	80,935	74,621	155,556	4.83	11.62
East Central	1.97	18,629	17,668	36,297	1.13	19.85
Migratory	..	2,519	469	2,988	0.09	..
Total	100.00	1,613,904	1,605,622	3,219,526	100.00	36.63

The concentration of population in the urban areas of the State is shown in the following table :

VICTORIA—PERCENTAGE OF POPULATION AND MASCULINITY IN METROPOLITAN, URBAN, AND RURAL AREAS (a)

Area(a)	Percentage of population				Masculinity(b)
	Census 1961	Census 1966			Census 1966
	Persons	Males	Females	Persons	
Urban—					
Metropolitan	63.42	64.81	66.28	65.54	98.28
Other	19.80	19.82	20.12	19.97	99.00
Rural	16.62	15.22	13.57	14.40	112.76
Migratory	0.16	0.15	0.03	0.09	535.96
Total	100.00	100.00	100.00	100.00	100.52

(a) Metropolitan, urban, and rural in this table are determined on the basis of the "Linge concepts" explained under the heading *Delimitation of urban boundaries* on page 117.

(b) Number of males per 100 females.

The proportion of the population of the State in rural areas has again declined between the Censuses of 1961 and 1966.

Populations in local government areas in Victoria at the Census 1966 and as estimated at 30 June 1970 appear in the table on pages 124-9.

Urban centres

The concepts applied in delimiting urban boundaries have been referred to on page 117. Urban centres outside the Melbourne Metropolitan Area account for 20 per cent of the State's population. Geelong is the largest of these with a population of 105,059, followed by Ballarat (56,290), Bendigo (42,208), and Moe-Yallourn (23,198).

Urban centres with a population between 10,000 and 20,000 are Shepparton (17,506), Warrnambool (17,499), Morwell (16,610), Wangaratta (15,175), Traralgon (14,079), Mildura (12,931), Horsham (10,562), and Hamilton (10,054). In the 7,000 to 10,000 population groups are Ararat, Bairnsdale, Benalla, Castlemaine, Colac, Dromana-Sorrento, Echuca, Maryborough, Mornington-Balcombe, Sale, Swan Hill, Werribee, and Wodonga.

It should be remembered in reading the tables relating to urban centres which follow that where the populations given relate to the limits of urban development at each census date, as determined by application of the concepts for delimiting urban boundaries, the areas are not necessarily the same. The geographical limits of urban development may undergo change from one census date to another.

VICTORIA—SUMMARY OF POPULATION

Area	1961 Census population	1966 Census		
		Population	Dwellings	
			Occupied	Total
Melbourne Metropolitan Area	1,858,534	2,110,168	593,408	616,609
Other urban :				
Geelong—				
Bellarine Shire (part)	2,914	6,584	1,663	1,741
Corio Shire (part)	24,542	33,296	7,695	7,846
Geelong City	17,427	18,129	5,348	5,598
Geelong West City	17,681	17,538	5,327	5,569
Newtown and Chilwell City	11,788	11,700	3,391	3,553
South Barwon Shire (part)	13,570	17,812	4,730	4,915
Total urban Geelong	87,922	105,059	28,154	29,222
Ballarat—				
Ballaarat City (part)	40,520	41,026	11,418	11,956
Ballarat Shire (part)	8,348	10,245	2,251	2,323
Grenville Shire (part)	50	53	14	14
Sebastopol Borough	4,663	4,966	1,206	1,261
Total urban Ballarat	53,581	56,290	14,889	15,554
Bendigo—				
Bendigo City (part)	29,634	30,159	8,897	9,357
Eaglehawk Borough (part)	4,426	5,033	1,444	1,542
Marong Shire (part)	2,527	2,988	767	793
Strathfieldsaye Shire (part)	2,859	4,028	995	1,033
Total urban Bendigo	39,446	42,208	12,103	12,725

VICTORIA—SUMMARY OF POPULATION—*continued*

Area		1961 Census population	1966 Census		
			Population	Dwellings	
				Occupied	Total
Other urban— <i>continued</i>					
Moe-Yallourn—					
Moe City		15,463	16,531	4,091	4,221
Morwell Shire (part)		653	537	153	171
Naracan Shire (part)		1,867	1,880	445	471
Yallourn Works Area		5,010	4,250	1,020	1,096
Total urban Moe-Yallourn		22,993	23,198	5,709	5,959
Urban centres with—					
10,000–19,999	(8)	101,241	114,416	30,014	31,212
9,000–9,999	(2)	17,520	19,433	6,156	12,364
8,000–8,999	(5)	36,564	(a)41,978	10,696	11,131
7,000–7,999	(6)	40,208	(b)44,368	12,344	13,632
6,000–6,999	(2)	(c)16,571	13,536	3,716	3,971
5,000–5,999	(2)	10,610	11,414	3,224	3,382
4,000–4,999	(3)	12,627	13,484	3,774	4,134
3,000–3,999	(11)	35,068	(d)37,050	9,808	11,146
2,000–2,999	(21)	50,442	52,618	14,728	16,370
1,000–1,999	(45)	50,839	62,030	17,160	19,403
Less than 1,000	(8)	5,307	(e)5,905	1,878	4,381
Total other urban		580,939	642,987	174,353	194,586
Rural		486,031	463,383	121,222	142,546
Migratory		4,609	2,988	..	..
Total Victoria	(118)	2,930,113	3,219,526	888,983	953,741

(a) Includes that part of urban Albury-Wodonga in Victoria (population 8,653). Total population of Albury-Wodonga—1961, 28,796 ; 1966, 32,032.

(b) Includes that part of urban Echuca-Moama in Victoria (population 7,043). Total population of Echuca-Moama—1961, 7,253 ; 1966, 8,010.

(c) Includes urban Laverton in 1961. This formed part of the Melbourne Metropolitan Area in 1966.

(d) Includes that part of urban Yarrawonga-Mulwala in Victoria (population 3,163). Total population of Yarrawonga-Mulwala—1961, 3,770 ; 1966, 3,990.

(e) Includes that part of urban Barham-Koondrook in Victoria (population 604). Total population of Barham-Koondrook—1961, 1,736 ; 1966, 1,743.

NOTE. Figures in brackets indicate the number of urban centres in the size groups in 1966.

It should be noted that the boundary of an urban centre is not necessarily identical with the boundary of a municipality of the same name. Figures of census populations in local government areas of the State appear on pages 124–9.

Figures of population and total dwellings in urban centres are given in the following table. Again, where necessary, 1961 Census populations have been adjusted to conform with boundaries in force in 1966.

**VICTORIA—POPULATIONS OF URBAN CENTRES, CENSUSES 1961 AND
1966, AND NUMBER OF DWELLINGS, CENSUS 1966**

Urban centre	1961 Census popula- tion	1966 Census		Urban centre	1961 Census popula- tion	1966 Census		
		Popula- tion	Total number of dwell- ings			Popula- tion	Total number of dwell- ings	
Melbourne Metro- politan Area—				Other urban centres— continued				
Altona	15,758	25,020	6,252	Beaufort	1,240	1,264	404	
Berwick(a)	6,526	13,124	2,796	Beechworth	3,508	3,554	703	
Box Hill	50,412	54,529	15,284	Benalla	8,234	8,224	2,336	
Brighton	41,302	40,617	13,355	Bendigo	39,446	42,208	12,725	
Broadmeadows(a)	64,992	86,911	20,122	Berwick	1,262	1,720	515	
Brunswick	53,093	52,012	15,286	Birchip	1,065	1,147	302	
Camberwell	99,353	99,908	32,011	Bright	705	747	383	
Caulfield	74,859	76,119	26,598	Broadford	1,678	1,605	476	
Chelsea	22,355	24,789	7,669	Camperdown	3,446	3,540	1,060	
Coburg	70,771	68,568	19,257	Casterton	2,442	2,492	722	
Collingwood	25,413	22,459	6,373	Castlemaine	7,216	7,103	2,220	
Cranbourne (a)	(b)	143	40	Charlton	1,587	1,603	444	
Croydon (a)	14,803	21,353	6,008	Cobden	(d)	1,233	342	
Dandenong (a)	23,379	31,054	8,242	Cobram	2,498	2,888	785	
Diamond Valley (a)	11,693	20,997	5,306	Cohuna	1,843	2,061	577	
Doncaster and Templestowe (a)	13,940	33,382	9,333	Colac	9,252	9,498	2,732	
Eltham (a)	10,545	15,216	4,180	Coleraine	1,503	1,518	466	
Essendon	58,987	58,258	17,894	Corryong	1,129	1,665	425	
Fitzroy	29,399	27,219	7,484	Cowes	607	765	694	
Footscray	60,734	58,823	16,790	Creswick	1,670	1,658	488	
Frankston (a)	23,692	38,718	11,833	Crib Point	2,078	1,829	428	
Hawthorn	36,707	36,728	13,749	Daylesford	2,776	2,664	1,076	
Heidelberg	59,795	63,929	16,813	Dimboola	1,923	1,872	589	
Keilor (a)	26,798	40,430	10,337	Donald	1,517	1,626	493	
Kew	33,341	32,816	9,827	Dromana-Sorrento	8,268	9,935	9,632	
Knox (a)	15,697	32,394	8,927	Drouin	2,511	2,655	791	
Laverton	(b)	6,128	1,169	Echuca-Moama	(part) (f)	6,443	7,043	2,017
Lillydale (a)	5,329	14,066	4,177	Euroa	3,020	2,789	882	
Malvern	47,870	50,059	17,133	Geelong	87,922	105,059	29,222	
Melbourne	76,810	75,997	21,554	Geelong	9,495	10,054	2,774	
Moorabbin	94,242	103,787	28,778	Hamilton	(d)	1,136	393	
Mordialloc	26,526	28,076	8,530	Hastings	2,368	2,676	840	
Mornington (a)	546	1,704	787	Healesville	1,287	1,187	347	
Northcote	55,750	56,200	17,078	Heathcote	1,917	1,893	505	
Nunawading	53,133	74,577	20,086	Heyfield	(d)	1,011	275	
Oakleigh	47,300	52,766	14,011	Heywood	(d)	1,024	291	
Port Melbourne	12,370	12,591	3,487	Hopetoun	9,240	10,562	3,024	
Prahran	52,554	54,655	21,537	Horsham	845	851	696	
Preston	84,146	89,767	23,202	Inverloch	3,838	4,164	1,175	
Richmond	33,863	32,530	9,913	Kerang	1,010	1,096	292	
Ringwood	24,136	29,141	7,943	Kilmore	(d)	1,014	294	
St Kilda	52,205	58,129	24,511	Koo-Wee-Rup	1,466	1,416	375	
Sandringham	37,001	36,671	11,241	Koroit	3,237	2,991	882	
Sherbrooke (a)	9,414	9,999	3,449	Korumburra	3,936	4,645	1,303	
South Melbourne	32,528	30,233	9,918	Kyabram	3,366	3,446	1,115	
Springvale (a)	25,630	37,668	10,049	Kyneton	1,602	1,837	764	
Sunshine (a)	61,960	69,072	16,566	Lakes Entrance	4,152	(g)	(g)	
Waverley (a)	43,269	68,896	17,982	Laverton	3,059	3,246	943	
Whittlesea (a)	6,646	11,491	2,923	Leongatha	1,080	958	735	
Williamstown	30,962	30,449	8,819	Lorne	3,404	3,569	1,018	
				Maffra	1,071	1,065	432	
				Maldon	1,944	2,019	572	
Total Melbourne Metropolitan Area	1,858,534	2,110,168	616,609	Mansfield	7,235	7,707	2,365	
Other urban centres—				Maryborough	1,737	1,684	494	
Albury-Wodonga				Merbein	12,279	12,931	3,755	
(part) (c)	7,398	8,653	2,340	Mildura	22,993	23,198	5,959	
Alexandra	1,945	2,014	610	Moorepoona	2,505	2,568	683	
Anglesea	522	726	901	Mornington-				
Apollo Bay	948	957	346	Balcombe	5,701	7,349	2,799	
Ararat	7,934	8,233	2,116	Mortlake	1,297	1,248	369	
Avoca	(d)	1,016	336	Morwell	14,542	16,610	4,113	
Bacchus Marsh	3,336	3,707	1,039	Mount Beauty	1,509	1,568	496	
Bairnsdale	7,427	7,785	2,231	Murtoa	1,135	1,109	343	
Ballarat	53,581	56,290	15,554	Myrtleford	2,163	2,545	673	
Barham-Koon- drook (part) (e)	600	604	175	Nathalia	1,276	1,369	394	
				Nhill	2,233	2,251	756	
				Numurkah	2,687	2,770	800	
				Ocean Grove-				
				Barwon Heads	2,585	3,144	1,772	

VICTORIA—POPULATIONS OF URBAN CENTRES, CENSUSES 1961 AND 1966, AND NUMBER OF DWELLINGS, CENSUS 1966—*continued*

Urban centre	1961 Census popula- tion	1966 Census		Urban centre	1961 Census popula- tion	1966 Census	
		Popula- tion	Total number of dwell- ings			Popula- tion	Total number of dwell- ings
Other urban centres— <i>continued</i>				Other urban centres— <i>continued</i>			
Orbost	2,613	2,797	726	Tatura	2,166	2,496	709
Ouyen	1,628	1,645	414	Terang	2,137	1,991	611
Pakenham East	1,324	1,680	485	Torquay	1,243	1,477	1,060
Portarlington	1,003	1,224	539	Trafalgar	1,774	1,729	518
Port Fairy	2,426	2,579	849	Traralgon	12,300	14,079	3,662
Portland	6,014	6,690	2,063	Wangaratta	13,784	15,175	4,139
Queenscliffe	2,659	2,787	1,531	Warburton	1,630	1,545	591
Red Cliffs	2,440	2,439	727	Warracknabeal	3,061	3,151	1,014
Robinvale	1,243	1,404	344	Warragul	6,405	6,846	1,908
Rochester	1,965	2,122	611	Warrandyte	(d)	1,085	337
Rushworth	1,077	1,093	341	Warrnambool	15,702	17,499	4,839
Rutherglen	1,222	1,287	410	Werribee	5,099	8,228	2,025
Sale	7,899	8,640	2,317	Wonthaggi	4,853	4,675	1,654
Sea Lake	(d)	1,026	284	Woodend	1,224	1,221	391
Seymour	5,104	5,505	1,536	Wycheproof	(d)	1,005	276
Shepparton	13,899	17,506	4,910	Yarra Junction	1,259	1,121	398
St Arnaud	3,150	3,004	948	Yarram	2,001	2,015	588
Stawell	5,506	5,909	1,846	Yarrawonga—			
St Leonards	(d)	297	419	Mulwala (part) (h)	3,022	3,163	945
Sunbury	3,131	3,526	589	Yea	1,113	1,084	337
Swan Hill	6,186	7,381	2,007				
Tallangatta	1,003	1,000	295	Total other urban centres	580,939	642,987	194,586

(a) Includes only that part of the local government area which is within the Melbourne Metropolitan Area. The remainder is in each case included under other urban or is rural.

(b) Non-Metropolitan in 1961.

(c) That part of Albury-Wodonga in Victoria. See note (a) to previous table.

(d) Non-urban in 1961.

(e) That part of Barham-Koondrook in Victoria. See note (e) to previous table.

(f) That part of Echuca-Moama in Victoria. See note (b) to previous table.

(g) Part of Melbourne Metropolitan Area in 1966.

(h) That part of Yarrawonga-Mulwala in Victoria. See note (d) to previous table.

Population estimates

The estimated population in each State or Territory is now derived by a new method and represents the population ascertained at the Census plus recorded natural increase and recorded net gain from overseas migration for that State or Territory; gains and corresponding losses that result from movements between States and Territories are also taken into account insofar as they are recorded as transfers of State of residence under child endowment procedures or Commonwealth electoral procedures, supplemented by results of any special count or sample survey. Holiday, business, or other similar short-term movements between States and Territories are omitted. As records of migration by State or Territory are not complete the estimated State and Territory populations so derived are approximate and are subject to revision when the actual population of each State is ascertained at the next Census.

The following tables give the estimated population of each Australian State and Territory at 31 December 1970 and the estimated population of Victoria from 1836 to 1870.

**AUSTRALIA—ESTIMATED POPULATION (a) OF STATES AND TERRITORIES
AT 31 DECEMBER 1970**

State or Territory	Area in square miles	Estimated population at 31 December 1970	Persons to the square mile	Percentage of population in each State or Territory
New South Wales	309,433	4,623,897	14.94	36.37
Victoria	87,884	3,480,833	39.61	27.38
Queensland	667,000	1,820,045	2.73	14.32
South Australia	380,070	1,177,807	3.10	9.26
Western Australia	975,920	1,001,315	1.03	7.88
Tasmania	26,383	395,573	14.99	3.11
Northern Territory	520,280	74,136	0.14	0.58
Australian Capital Territory(b)	939	139,763	148.84	1.10
Australia	2,967,909	12,713,396	4.28	100.00

(a) Including Aborigines.

(b) Including Jervis Bay.

VICTORIA—ESTIMATED POPULATION

Year	Estimated population, 31 December		
	Males	Females	Persons
1836 (25 May)	142	35	177
1840	7,254	3,037	10,291
1850	45,495	30,667	76,162
1860	330,302	207,932	538,234
1870	397,230	326,695	723,925
1880	450,558	408,047	858,605
1890	595,519	538,209	1,133,728
1900	601,773	594,440	1,196,213
1910	646,482	654,926	1,301,408
1920	753,803	774,106	1,527,909
1930	892,422	900,183	1,792,605
1940	947,037	967,881	1,914,918
1950	1,114,497	1,122,685	2,237,182
1960	1,453,815	1,434,475	2,888,290
1961	1,485,348	1,469,951	2,955,299
1962	1,511,418	1,499,625	3,011,043
1963	1,540,749	1,530,297	3,071,046
1964	1,573,966	1,563,955	3,137,921
1965	1,602,058	1,593,802	3,195,860
1966	1,628,672	1,621,198	3,249,870
1967	1,655,935	1,647,696	3,303,631
1968	1,683,474	1,673,407	3,356,881
1969	1,716,126	1,704,016	3,420,142
1970	1,747,032	1,733,801	3,480,833

NOTE. Estimates of population from 1961 onwards include Aborigines.

The following table shows the population and the number of dwellings in each of the municipalities and Statistical Divisions of Victoria at the 1966 Census and as estimated at 30 June 1970, together with the area of the municipality at 30 June 1970. In this table both Census figures and estimates include Aborigines. However, the difference between the Census date figures including Aborigines and Census figures published earlier, although occasioned by the necessity to include full-blooded Abori-

ginals for comparison with later populations, is not to be taken as a reliable measure of the Aboriginal population of the area concerned. Census information regarding Aboriginals is to be found in the special Census publication *The Aboriginal Population of Australia*, issued on 16 April 1969.

For the purpose of the Census, a "dwelling" is any habitation occupied by a household group living together as a domestic unit, with common eating arrangements, whether comprising the whole or any part of a building. The term has, therefore, a very wide reference and includes, in addition to houses and flats, anything from a single-roomed shack to a multi-roomed hotel or institution. In the following tables, the figures for dwellings represent all dwellings, whether private or other, and whether occupied or unoccupied.

See Appendix C for preliminary results of the 1971 Census of Population and Housing. Estimates given below are subject to amendment in the light of Census results.

VICTORIA—POPULATION, DWELLINGS, AND AREA BY MUNICIPALITY

Local government area	Population		Dwellings (a)		Area at 30. 6. 1970 (sq miles)
	Census 30. 6. 1966	Estimate 30. 6. 1970	Census 30. 6. 1966	Estimate 30. 6. 1970	

MELBOURNE STATISTICAL DIVISION					
Altona City (d)	25,020	28,600	6,252	7,649	15.52
Berwick Shire (part)(b)	19,880	22,300	4,913	5,842	108.94
Box Hill City	54,534	56,700	15,284	16,118	8.30
Brighton City	40,618	40,800	13,355	13,774	5.28
Broadmeadows City	88,080	96,400	20,403	23,714	27.33
Brunswick City	52,018	51,800	15,286	16,299	4.10
Bulla Shire	5,711	7,200	1,145	1,743	163.00
Camberwell City	99,913	100,500	32,011	33,168	13.57
Caulfield City	76,119	78,800	26,598	31,156	8.49
Chelsea City	24,789	26,900	7,669	8,480	4.72
Coburg City	68,577	68,700	19,257	19,467	7.21
Collingwood City	22,469	21,000	6,373	6,464	1.84
Cranbourne Shire (part) (b)	9,307	10,900	3,023	3,741	153.69
Croydon Shire	21,769	26,000	6,106	7,767	13.00
Dandenong City	31,700	37,700	8,410	10,751	14.00
Diamond Valley Shire	22,999	30,500	5,852	8,784	32.94
Doncaster and Templestowe City (d)	38,087	52,100	10,719	16,201	34.52
Eltham Shire	20,211	22,700	5,828	6,788	116.01
Essendon City	58,258	58,900	17,894	19,093	6.36
Fitzroy City	27,227	26,700	7,484	7,740	1.41
Flinders Shire	12,525	14,600	11,409	13,558	125.00
Footscray City	58,832	59,300	16,790	17,523	6.94
Frankston City (d)	42,085	52,100	12,759	16,703	27.28
Hastings Shire	7,280	8,400	2,847	3,463	112.00
Hawthorn City	36,728	37,400	13,749	15,254	3.77
Healesville Shire (part)(b)	5,136	5,400	1,612	1,722	108.88
Heidelberg City	63,932	68,900	16,813	18,741	12.50
Keilor City	43,398	50,700	11,146	14,024	37.91
Kew City	32,819	33,100	9,827	10,377	5.62
Knox City (d)	36,514	47,500	10,089	14,375	42.50
Lillydale Shire	24,494	29,800	7,746	10,071	153.50
Malvern City	50,061	51,900	17,133	18,329	6.15
Melbourne City	76,006	76,900	21,554	24,466	12.13
Melton Shire	2,559	4,300	734	1,413	173.91
Moorabbin City	103,787	111,200	28,778	31,691	19.77

For footnotes see page 129.

VICTORIA—POPULATION, DWELLINGS, AND AREA—*continued*

Local government area	Population		Dwellings (a)		Area at 30. 6. 1970 (sq miles)
	Census 30. 6. 1966	Estimate 30. 6. 1970	Census 30. 6. 1966	Estimate 30. 6. 1970	
MELBOURNE STATISTICAL DIVISION—continued					
Mordialloc City	28,078	30,600	8,530	9,859	4. 71
Mornington Shire	10,217	12,500	4,201	5,497	35.00
Northcote City	56,213	58,100	17,078	19,156	6. 60
Nunawading City	74,578	86,000	20,086	24,594	16. 00
Oakleigh City	52,769	56,900	14,011	15,591	11. 70
Port Melbourne City	12,591	12,400	3,487	3,417	4. 11
Prahran City	54,658	57,900	21,537	24,570	3. 69
Preston City	89,775	93,900	23,202	24,793	14. 30
Richmond City	32,532	31,500	9,913	9,798	2. 36
Ringwood City	29,141	33,100	7,943	9,481	8. 79
St Kilda City	58,138	61,700	24,511	27,014	3. 31
Sandringham City	36,672	36,900	11,241	11,770	5. 78
Sherbrooke Shire	17,674	18,700	6,636	7,130	74. 50
South Melbourne City	30,233	29,000	9,918	10,003	3. 44
Springvale City	39,431	51,300	10,512	15,149	37. 68
Sunshine City	69,264	75,700	16,605	19,369	30. 89
Waverley City	69,845	85,500	18,303	24,518	22. 61
Werribee Shire	18,380	22,400	4,035	5,608	258. 00
Whittlesea Shire	16,713	23,600	4,372	7,110	231. 00
Williamstown City	30,449	30,900	8,819	9,471	5. 60
Total Division	2,230,793	2,425,300	661,788	760,347	2,368. 25
WEST CENTRAL STATISTICAL DIVISION					
Bacchus Marsh Shire	4,674	4,870	1,319	1,382	218. 60
Ballan Shire	2,349	2,320	909	921	355. 00
Bannockburn Shire	2,213	2,220	692	697	272. 00
Barrabool Shire	2,914	3,370	1,963	2,400	229. 00
Bellarine Shire	14,523	16,900	5,425	6,650	128. 00
Bungaree Shire	2,207	2,360	599	656	88. 00
Buninyong Shire	4,836	5,120	1,345	1,456	300. 00
Corio Shire	36,222	40,020	8,689	10,202	270. 00
Geelong City	18,129	18,220	5,598	5,737	5. 19
Geelong West City	17,538	17,500	5,569	5,694	2. 03
Gisborne Shire	2,311	2,490	914	1,010	107. 40
Kilmore Shire (part)	720	700	220	244	99. 00
Newtown City (e)	11,700	11,660	3,553	3,705	2. 31
Queenscliffe Borough	2,788	3,000	1,531	1,686	3. 28
Romsey Shire	2,516	2,480	885	906	239. 00
South Barwon Shire	22,056	24,960	7,026	8,332	63. 84
Total Division	147,696	158,190	46,237	51,678	2,382. 65
NORTH CENTRAL STATISTICAL DIVISION					
Alexandra Shire	4,484	4,450	1,648	1,711	735. 00
Broadford Shire	1,978	1,940	633	675	222. 50
Castlemaine City	7,103	7,060	2,220	2,260	9. 00
Creswick Shire	3,540	3,510	1,117	1,144	213. 00
Daylesford and Glenlyon Shire	4,398	4,390	1,832	1,871	235. 27
Kilmore Shire (part)	2,019	2,070	483	534	97. 50
Kyneton Shire	5,970	5,970	2,033	2,068	280. 00
Maldon Shire	1,953	1,910	729	737	216. 00
Maryborough City	7,707	7,880	2,365	2,479	9. 00
McIvor Shire	1,896	1,860	580	603	561. 00
Metcalfe Shire	2,163	2,130	747	759	228. 00
Newham and Woodend Shire	1,995	1,960	707	736	95. 00
Newstead Shire	1,781	1,750	667	683	158. 00

For footnotes see page 129.

VICTORIA—POPULATION, DWELLINGS, AND AREA—*continued*

Local government area	Population		Dwellings (a)		Area at 30. 6. 1970 (sq miles)
	Census 30. 6. 1966	Estimate 30. 6. 1970	Census 30. 6. 1966	Estimate 30. 6. 1970	
NORTH CENTRAL STATISTICAL DIVISION— <i>continued</i>					
Pyalong Shire	456	460	129	129	233.00
Seymour Shire	11,272	11,680	2,550	2,856	366.65
Talbot and Clunes Shire	1,514	1,470	534	531	206.00
Tullaroop Shire	1,277	1,240	424	430	246.00
Yea Shire	2,620	2,610	927	954	528.35
Total Division	64,126	64,340	20,325	21,160	4,639.27

WESTERN STATISTICAL DIVISION

Ararat City	8,246	8,480	2,116	2,304	7.36
Ararat Shire	4,644	4,650	1,382	1,385	1,411.92
Ballaarat City	41,661	41,930	12,133	12,297	13.36
Ballarat Shire	12,246	13,110	2,876	3,479	184.00
Belfast Shire	1,857	1,870	477	481	200.00
Camperdown Town	3,540	3,630	1,060	1,125	5.61
Colac City	9,499	9,730	2,732	2,926	4.20
Colac Shire	6,959	6,890	1,960	1,955	563.00
Dundas Shire	3,923	3,920	1,183	1,211	1,337.60
Glenelg Shire	5,838	5,840	1,735	1,757	1,383.00
Grenville Shire	1,692	1,710	581	623	326.00
Hamilton City	10,062	10,200	2,774	2,870	8.36
Hampden Shire	8,773	8,710	2,598	2,563	1,011.00
Heytesbury Shire (c)	8,182	8,420	2,129	2,300	584.00
Koroit Borough	1,416	1,400	375	384	8.90
Leigh Shire	1,402	1,370	394	386	379.00
Lexton Shire	1,375	1,360	373	380	317.00
Minhamite Shire	2,824	2,790	769	771	527.00
Mortlake Shire	4,400	4,370	1,215	1,212	825.00
Mount Rouse Shire	3,042	3,040	905	931	548.00
Otway Shire (c)	3,908	3,910	1,486	1,628	736.30
Port Fairy Borough	2,579	2,610	849	872	8.88
Portland Town (c)	6,697	7,390	2,063	2,446	13.17
Portland Shire (c)	6,875	6,580	2,152	2,153	1,421.17
Ripon Shire	3,520	3,510	1,104	1,136	592.00
Sebastopol Borough	4,966	5,110	1,261	1,368	2.73
Wannon Shire	4,059	4,020	1,199	1,210	763.40
Warrnambool City	17,500	18,370	4,839	5,366	11.08
Warrnambool Shire	7,506	7,530	2,032	2,059	613.00
Winchelsea Shire	4,241	4,230	1,743	1,783	495.70
Not incorporated (Lady Julia Percy Island and Tower Hill Lake Reserve)	..	..	..	..	3.30
Total Division	203,432	206,680	58,495	61,361	14,305.04

WIMMERA STATISTICAL DIVISION

Arapiles Shire	2,142	2,140	589	600	768.00
Avoca Shire	2,133	2,140	719	735	434.00
Dimboola Shire	5,907	5,870	1,745	1,737	1,899.00
Donald Shire	2,947	2,950	852	861	559.00
Dunmunkle Shire	3,952	3,900	1,162	1,162	597.00
Horsham City	10,562	11,190	3,024	3,394	9.28
Kaniva Shire	2,371	2,340	708	718	1,191.00
Kara Kara Shire	1,360	1,340	411	414	885.25
Kowree Shire	5,362	5,380	1,535	1,588	2,080.00

For footnotes see page 129.

VICTORIA—POPULATION, DWELLINGS, AND AREA—*continued*

Local government area	Population		Dwellings (a)		Area at 30. 6. 1970 (sq miles)
	Census 30. 6. 1966	Estimate 30. 6. 1970	Census 30. 6. 1966	Estimate 30. 6. 1970	
WIMMERA STATISTICAL DIVISION—continued					
Lowan Shire	3,824	3,830	1,218	1,246	1,036.00
St Arnaud Town	3,004	2,990	948	972	9.81
Stawell Town	5,909	6,070	1,846	1,933	9.30
Stawell Shire	2,345	2,370	792	816	1,009.75
Warracknabeal Shire	4,714	4,690	1,478	1,506	710.00
Wimmera Shire	3,485	3,440	912	910	1,009.00
Total Division	60,017	60,640	17,939	18,592	12,206.39
MALLEE STATISTICAL DIVISION					
Birchip Shire	1,919	1,920	503	505	567.00
Karkarooc Shire	4,247	4,250	1,186	1,205	1,436.00
Mildura City	12,934	13,290	3,755	3,998	8.45
Mildura Shire	16,315	16,440	4,980	5,102	4,071.00
Swan Hill City	7,398	7,890	2,007	2,297	5.27
Swan Hill Shire	13,000	13,210	3,451	3,505	2,530.00
Walpeup Shire	4,431	4,410	1,208	1,241	4,168.00
Wycheproof Shire	4,777	4,800	1,263	1,300	1,589.00
Total Division	65,021	66,210	18,353	19,153	14,374.72
NORTHERN STATISTICAL DIVISION					
Bendigo City	30,806	31,750	9,500	10,064	12.55
Bet Bet Shire	1,975	1,920	682	662	358.00
Charlton Shire	2,499	2,490	697	688	454.00
Cobram Shire	5,261	5,440	1,375	1,468	170.00
Cohuna Shire	4,658	4,790	1,271	1,344	192.00
Deakin Shire	5,705	5,860	1,546	1,626	371.00
Eaglehawk Borough	5,230	5,470	1,602	1,717	5.60
East Loddon Shire	1,722	1,770	486	518	461.00
Echuca City	7,044	7,480	2,017	2,218	7.84
Gordon Shire	3,320	3,370	936	963	781.00
Goulburn Shire	1,842	1,860	653	689	398.00
Huntly Shire	2,323	2,390	699	737	339.00
Kerang Borough	4,164	4,310	1,175	1,257	8.83
Kerang Shire	5,264	5,260	1,468	1,475	1,278.17
Korong Shire	3,663	3,620	1,186	1,168	921.00
Kyabram Borough	4,645	5,020	1,303	1,494	8.05
Marong Shire	6,488	6,840	1,847	2,043	575.00
Nathalia Shire	3,225	3,400	928	977	478.00
Numurkah Shire	6,242	6,370	1,661	1,730	279.00
Rochester Shire	7,428	7,710	2,141	2,292	749.00
Rodney Shire	11,891	12,420	3,159	3,417	397.00
Shepparton City	17,488	18,800	4,906	5,564	10.31
Shepparton Shire	6,183	6,410	1,564	1,699	357.06
Strathfieldsaye Shire	6,703	7,350	1,749	2,105	239.00
Tungamah Shire	3,237	3,280	812	833	441.00
Waranga Shire	4,506	4,540	1,313	1,358	635.00
Yarrawonga Shire	3,805	3,980	1,180	1,282	243.00
Total Division	167,317	173,900	47,856	51,388	10,169.41
NORTH EASTERN STATISTICAL DIVISION					
Beechworth Shire	4,806	4,780	1,110	1,138	297.90
Benalla City	8,224	8,500	2,336	2,531	6.82
Benalla Shire	3,728	3,760	1,056	1,080	896.48
Bright Shire	4,526	4,720	1,655	1,789	1,146.00

For footnotes see page 129.

VICTORIA—POPULATION, DWELLINGS, AND AREA—*continued*

Local government area	Population		Dwellings (a)		Area at 30. 6. 1970 (sq miles)
	Census 30. 6. 1966	Estimate 30. 6. 1970	Census 30. 6. 1966	Estimate 30. 6. 1970	
NORTH EASTERN STATISTICAL DIVISION—continued					
Chiltern Shire	1,522	1,480	492	499	192.10
Euroa Shire	4,589	4,560	1,470	1,519	545.00
Mansfield Shire	4,275	4,340	1,709	1,914	1,508.00
Myrtleford Shire	4,374	4,560	1,140	1,260	275.00
Omeo Shire	2,026	2,010	627	656	2,232.00
Oxley Shire (c)	5,362	5,480	1,486	1,537	1,079.57
Rutherglen Shire	2,556	2,520	821	829	205.00
Towong Shire	4,079	4,050	1,243	1,281	1,602.00
Upper Murray Shire	3,337	3,260	952	986	949.00
Violet Town Shire	1,236	1,190	436	439	361.00
Wangaratta City (c)	15,181	15,890	4,139	4,512	9.30
Wangaratta Shire (c)	1,957	1,880	588	596	353.49
Wodonga Shire (f)	11,878	12,690	2,779	3,230	134.00
Yackandandah Shire	3,063	3,040	879	887	429.00
Total Division	86,719	88,710	24,918	26,683	12,221.66
GIPPSLAND STATISTICAL DIVISION					
Alberton Shire	5,844	5,830	1,861	1,916	721.00
Avon Shire (c)	3,236	3,180	838	909	976.50
Bairnsdale Town (c) (d)	..	8,500	..	2,620	10.50
Bairnsdale Shire (c)	11,566	3,540	3,550	1,301	879.50
Buln Buln Shire	8,700	8,870	2,525	2,672	486.00
Maffra Shire	8,510	8,570	2,463	2,628	1,611.00
Mirboo Shire	2,116	2,120	586	592	98.00
Moe City	16,555	16,800	4,221	4,414	8.26
Morwell Shire	20,829	21,970	5,257	6,066	259.00
Narracan Shire	9,045	9,020	2,616	2,719	892.00
Orbost Shire	6,434	6,780	1,999	2,184	3,700.00
Rosedale Shire	4,904	5,070	1,719	1,910	879.00
Sale City (c)	8,643	9,740	2,317	2,806	9.88
South Gippsland Shire	5,407	5,660	1,725	1,931	553.00
Tambo Shire	5,558	5,630	2,038	2,317	1,356.00
Traralgon City	14,080	14,640	3,662	3,996	7.70
Traralgon Shire	1,264	1,290	336	360	180.30
Warragul Shire	9,928	10,220	2,783	2,985	136.00
Woorayl Shire	8,927	9,260	3,039	3,420	481.00
Yallourn Works Area	4,250	3,940	1,096	1,069	13.52
Not incorporated (Gippsland Lakes, Bass Strait Islands)	..	..	..	..	129.51
Total Division	155,796	160,630	44,631	48,815	13,387.67
EAST CENTRAL STATISTICAL DIVISION					
Bass Shire	3,857	3,870	1,505	1,637	203.00
Berwick Shire (part) (b)	8,909	9,030	2,907	3,114	280.06
Cranbourne Shire (part) (b)	3,793	3,830	1,101	1,165	133.31
Healesville Shire (part) (b)	1,299	1,290	482	499	239.12
Korumburra Shire	7,354	7,300	2,171	2,202	237.00
Phillip Island Shire	1,408	1,450	1,468	1,997	39.00
Upper Yarra Shire	5,456	5,460	2,112	2,284	612.00
Wonthaggi Borough	4,026	4,010	1,419	1,500	20.45
Not incorporated (French Island)	210	190	34	41	65.00
Total Division	36,312	36,430	13,199	14,439	1,828.94

For footnotes see page 129.

VICTORIA—POPULATION, DWELLINGS, AND AREA—*continued*

Local government area	Population		Dwellings (a)		Area at 30.6.1970 (sq miles)
	Census 30.6.1966	Estimate 30.6.1970	Census 30.6.1966	Estimate 30.6.1970	
SUMMARY					
Statistical Divisions—					
Melbourne	2,230,793	2,425,300	661,788	760,347	2,368.25
West Central	147,696	158,190	46,237	51,678	2,382.65
North Central	64,126	64,340	20,325	21,160	4,639.27
Western	203,432	206,680	58,495	61,361	14,305.04
Wimmera	60,017	60,640	17,939	18,592	12,206.39
Mallee	65,021	66,210	18,353	19,153	14,374.72
Northern	167,317	173,900	47,856	51,388	10,169.41
North Eastern	86,719	88,710	24,918	26,683	12,221.66
Gippsland	155,796	160,630	44,631	48,815	13,387.67
East Central	36,312	36,430	13,199	14,439	1,828.94
Migratory	2,988	2,786	..	..	..
Total Victoria	3,220,217	3,443,816	953,741	1,073,616	87,884.00

NOTE. Due to rounding, the sums of the areas of the individual municipalities do not add to the area of their Statistical Division in all cases, nor to the area of the State as a whole.

(a) Dwellings include private and other dwellings, whether occupied or unoccupied.

(b) The following portions of the Shires of Berwick, Cranbourne, and Healesville are included in the Melbourne Statistical Division:

Berwick: Berwick and Doveton Ridings, and parts of Pakenham and Beaconsfield Ridings.

Cranbourne: Cranbourne Riding and part of Tooradin Riding.

Healesville: Town Riding, West Riding and part of Central Riding.

(c) During the period 1 July 1966 to 30 June 1970 the boundaries of the municipalities listed below were re-defined with change of area. The effective date of the transfer of the area transferred and the square miles involved are shown in each case.

Avon Shire to Sale City—1 October 1966, 0.017 sq miles.

Avon Shire to Sale City—31 May 1967, 1.48 sq miles.

Bairnsdale Shire to Bairnsdale Town—31 May 1967, 10.50 sq miles.

Oxley Shire to Wangaratta City—1 June 1968, 0.23 sq miles.

Portland Shire to Portland Town—31 May 1968, 3.83 sq miles.

Wangaratta Shire to Wangaratta City—1 June 1968, 0.51 sq miles.

Otway Shire to Heytesbury Shire—31 May 1969, 10.00 sq miles.

Benalla Shire to Benalla City—17 September 1969, 0.05 sq miles.

Waranga Shire to McIvor Shire—13 May 1970, 3.00 sq miles.

(d) Bairnsdale Town was created on 31 May 1967. The following Shires were declared Cities: Frankston (24 August 1966), Doncaster and Templestowe (28 February 1967), Altona (21 December 1968), Knox (4 July 1969).

(e) The City of Newtown and Chilwell was renamed Newtown City (14 November 1967).

(f) The population of the Shire of Wodonga includes residents at Bonegilla Migrant Centre. The Benalla Migrant Centre closed on 8 December 1967.

(g) The Statistical Division boundary has been altered slightly to conform with the new municipal boundaries between Waranga and McIvor Shires.

Immigration

Since the end of the Second World War, a programme of planned, large-scale immigration has been one of Australia's major objectives. The reasons have included:

Economic factors. The desire to develop Australia's resources in order to strengthen and diversify the economy, increase living standards, and maintain full employment.

Strategic factors. The Second World War brought realisation of the need to populate and develop Australia as rapidly as possible.

Social and humanitarian factors. The desire to help many refugees and others in Europe, who were unable or unwilling to return to former homelands, and who wished to emigrate overseas.

Demographic factors. The low birth rate during the depression years meant that the numbers entering the work force would not be sufficient to meet the needs of expansion.

Between October 1945 and December 1970, 3,515,614 persons came to Australia as "permanent and long-term arrivals", 1,728,563 of whom were assisted migrants.

Annual immigration programmes

Australia's annual immigration programmes are expressed in terms of "settler arrivals", i.e., persons who on arrival in Australia declare their intention of remaining here permanently. The target figure for each year is based on an appraisal of the likely availability of suitable migrants in the overseas source countries, and the absorptive capacity of the Australian economy. The 1969-70 immigration programme provided for 175,000 settlers. During this period arrivals against this programme totalled 185,099, constituting a record immigration year.

Sources of migrants

The immigration programme has three major components:

1. assisted migrants from the United Kingdom, Europe, and certain other countries;
2. the traditional "free flow" of British subjects coming to Australia outside the assisted immigration programme; and
3. other persons coming to Australia outside the assisted passage programme who, before entry, are required to obtain visas.

Assisted arrivals in Australia under various schemes, from their inception to December 1970, have been as follows:

AUSTRALIA—PERSONS ARRIVING UNDER ASSISTED MIGRATION SCHEMES

Assisted migration scheme	Date of commencement of scheme	Number assisted to December 1970
United Kingdom	April 1947	966,821
Refugee	November 1947	249,500
German	August 1952	92,164
Netherlands	April 1951	79,279
Special Passage Assistance Programme and United States Passage Assistance Programme	July 1966	65,565
Greek	August 1952	64,528
Italian	August 1951	55,625
Maltese	January 1949	41,160
General assisted passage schemes	September 1954	40,388
Austrian	August 1952	21,511
Spanish	August 1958	10,407
Turkish	October 1968	7,751
Belgian	February 1961	2,874
Other schemes		30,990
Total		1,728,563

Australian migration representatives overseas

The Commonwealth Department of Immigration maintains representatives in the United Kingdom, Eire, Austria, Argentina, Belgium, Chile, Denmark, France, Germany, Greece, Italy, Malta, Netherlands, Portugal, Spain, Sweden (covering Norway, Finland, and Iceland), Switzerland, Yugoslavia, Turkey, Lebanon, United Arab Republic, Hong Kong, India, Kenya, Ceylon, Fiji, and the United States of America.

Transport of assisted migrants

Movement of assisted migrants to Australia is centred on four main areas, namely, Britain, northern Europe, the Mediterranean, and the Americas.

A proportion of migrants recruited under the Special Passage Assistance Programme (S.P.A.P.), including at present all from the Americas and Africa, make their own travel arrangements. Movement of assisted migrants from Britain and of the majority of S.P.A.P. migrants from Europe is arranged by the Department of Immigration. Under present arrangements, movement of assisted migrants (other than S.P.A.P.) from Austria, Belgium, Germany, Greece, Italy, and Malta is organised by the Intergovernmental Committee for European Migration (I.C.E.M.). The Netherlands Government is responsible for the movement of its nationals. It has been proposed that I.C.E.M. should relinquish responsibility for these movements, except for refugees.

Transport for assisted migrants is now divided about equally between sea and air. This varies marginally from year to year. It varies substantially as between countries—for example, movement from Turkey and Spain is wholly by air. New contracts for the transport of assisted British and S.P.A.P. migrants as from 1 July 1970 will place increased emphasis on air movement from Britain and northern Europe.

Recent developments

There have been several recent developments in the field of immigration. In the broad context of social welfare all nationality requirements for social services have been abolished; the residential qualifying period has been removed for payment of widow's pension to women widowed in Australia where husband and wife are permanently resident in Australia at the time of the husband's death; unemployment and sickness benefits payable to unmarried minors, who have no parent living in Australia, have been increased to the adult rate; the period for which a pensioner making a temporary visit overseas may receive payment of pension on return to Australia has been increased from 12 to 30 weeks; and the waiting time for eligibility for benefits under the hospital and medical benefit funds has been abolished for migrants who join the funds within two months of arrival in Australia. In addition, the Government will pay health insurance benefits for medical or hospital expenses incurred in the first two months following arrival in Australia, provided the migrant joins a fund at the time of making a claim.

In the field of migrant education steps have been taken to provide for the expansion of existing facilities for the instruction of adult migrants and for the provision of intensive full-time English language courses for those who must know English in order to follow occupations for which they have been trained. Special classes have also been arranged in existing schools for migrant children of all ages to ensure that they achieve the education to which their intelligence and natural skills entitle them.

In regard to housing, migrants now have equal rights with other Australians in relation to eligibility to apply for State Housing Commission homes in all States of the Commonwealth.

Three other measures have also been introduced:

1. Since July 1969 assisted passage programmes from Europe have been extended to the wives and dependent children of breadwinners now residing in Australia who did not themselves receive any form of passage assistance.
2. As from 1 January 1970 a uniform personal contribution of \$25 towards

the cost of passage for assisted migrants 19 years of age or over applies under all assisted passage programmes from Europe. Assisted migrants under the age of 19 make no contribution at all. The only exceptions are the British programme which was at the level of £10 stg for migrants 19 years of age or over before devaluation and which has not been changed, and the Greek programme where application of the new rate commenced on 1 January 1971.

3. An agreement between the Australian and Yugoslav Governments has been concluded. This agreement extends to Yugoslavia the benefits of passage assistance to breadwinners and their families on the same financial basis as all other assisted migrants who move in departmentally arranged transport. The agreement is expected to place the movement of settlers from Yugoslavia on a stable and continuing basis, eliminate a major reason for separation of families, and speed up the movement of desirable applicants whose movement has been delayed through lack of funds.

Immigration organisation

The State Government, through its Immigration Office, plays an important part in British assisted migration. (See also below.) It receives personal nominations for relatives and friends, and employer nominations for workers, and is also responsible for the reception and after-care arrangements for those migrants. Other official immigration functions are the responsibility of the Commonwealth Department of Immigration, which has a branch office in Melbourne.

Government activity in the field of migration is aided and supplemented by a number of advisory bodies and voluntary organisations, including the Commonwealth Immigration Planning Council, the Commonwealth Immigration Advisory Council, the Commonwealth Immigration Publicity Council, the Citizenship Convention held every second year in Canberra, and the Good Neighbour Movement. The Good Neighbour Movement is a nation-wide voluntary organisation formed with the basic objective of assisting the satisfactory integration of every new settler. In Victoria there are over 150 centres of operation and 161 affiliated organisations. Contained in these bodies are six hundred members of branches and committees and eighty-five individual representatives who are directly engaged in the specific task of aiding the integration of newcomers.

Welfare

The Commonwealth provides the services of professional social workers, welfare aides, translators, and interpreters through its Melbourne Immigration Office. In addition, grants in aid are paid to selected voluntary welfare agencies in the community for the employment of qualified social workers who assist with settlement problems. Commonwealth Hostels Limited has available within its hostel network a number of welfare services officers who help migrants with their social problems arising soon after arrival in Australia. In addition, the Department employs a number of psychologists who undertake research and surveys into the problems of migrants and their integration. This research frequently involves field work in the various States including Victoria.

National groups

For several years past there have been indications of the need for the

Department to develop a closer and more practical relationship with the many organisations set up throughout Australia by groups of migrants of various ethnic backgrounds. These reflect a wide range of interests and include groups from all the European countries involved in the migration programme, as well as from the United Kingdom, the United States, and some Middle Eastern countries.

The Commonwealth Department of Immigration is obtaining information on the organisation and structure of migrant national groups, developing channels of communication and liaison between the groups and the Department, and helping to co-ordinate the services they may be encouraged to provide for migrants to assist in the integration process, both in Australia and overseas prior to embarkation.

Migrant education programme

The Commonwealth Government recognises that the ability of migrants to communicate is a vital factor in their successful and effective integration. The Commonwealth Department of Immigration, in conjunction with the Commonwealth Department of Education and Science and the State Education Departments, is responsible for a comprehensive education programme for both child and adult migrants.

The adult programme which began in 1947 commences with language instruction in the source country before embarkation, is continued on board all major migrant carrying ships during the voyage to Australia, and is followed by continuation classes, correspondence lessons, and radio and television broadcasts for migrants once established in the Australian community.

Full-time intensive courses were introduced in 1969. These courses are open to professional and well-qualified people who have reached a certain educational standard, who require a good knowledge of English to be suitably employed, and who would benefit from the intensive type of instruction. Such courses are held at the Royal Melbourne Institute of Technology and at adult education centres in Melbourne and in other cities throughout Australia. English lessons are given free to migrants. Migrant students who attend full-time intensive courses receive a living allowance during their period of training.

In 1970 the Commonwealth Government decided on new initiatives to enable special help to be given to both State government and independent schools in which there are migrant children with English language problems. Direct financial assistance is now being given to State government and independent schools for the salary costs of teachers employed to teach migrant children in special classes and of necessary supervisory staff and for the provision of approved capital equipment for use in special classrooms established for this purpose. In addition, the Commonwealth provides schools with teaching and learning materials and arranges training courses for the teachers employed in the special instruction of migrant children.

Accommodation

Transitory accommodation for Commonwealth assisted migrant families is provided in hostels operated by Commonwealth Hostels or in Commonwealth owned self-contained flats. Families may remain for up to 12

months in hostels and 6 months in flats. Couples without children, and single men, are accommodated in Commonwealth hostels for up to 6 months and 3 months, respectively. There are eight Commonwealth migrant hostels in Melbourne and one at Geelong.

Hostels run by organisations such as the Y.W.C.A. and the Travellers' Aid Society of Victoria are used to accommodate single unaccompanied female migrants for up to 3 months from the date of arrival. Tariffs are subsidised by the Commonwealth. Some non-British migrants go to the Commonwealth Department of Immigration's Reception Centre at Bonegilla before placement in hostels or flats. Commonwealth nominated migrant families electing to settle in country areas, where there are no hostels or flats, may be accommodated in selected private establishments for periods of up to 26 weeks under Commonwealth subsidy arrangements. The Victorian State Government has a reception centre in Melbourne for British migrants arriving under State auspices.

State Immigration Office

The State Immigration Office was formed as a result of an agreement at the Premiers' Conference of 1946, when the States undertook the responsibility of dealing with nominations of British migrants, their reception, transit accommodation, travel to their final destination, and aftercare.

The ultimate arrival of a migrant in Victoria usually stems from a personal nomination lodged on his account by a resident of the State or by a group nomination. The former may be a relative, friend, or employer; the latter are usually commercial enterprises which seek to recruit particular categories of workers. The most essential requirement of any nomination is that an adequate guarantee of accommodation be provided. Between January 1947 and December 1970, the State approved 63,644 personal nominations involving 158,802 persons. Under personal and group nominations, 152,185 British migrants have arrived in Victoria. Many of these migrants have been skilled technicians sponsored by group nominations such as Victorian Railways, Melbourne and Metropolitan Tramways Board, and the State Electricity Commission. Their arrival has greatly augmented Victoria's labour force.

The State Immigration Office has its own group nomination, under which single persons or married couples who are without sponsors may apply for assisted passages. The nomination is in no way restricted to any particular type of occupation; it is open to all. Migrants who arrive under this nomination are provided with accommodation at the State Immigration Reception Centre until such time as private accommodation is available. At the same time, the Office undertakes to secure employment for these migrants.

The State Immigration Office renders every assistance in order that migrants may be quickly assimilated into the Victorian community. Where migrants who have arrived under personal nomination are experiencing accommodation difficulties, temporary hostel accommodation is sometimes provided. Assistance is also given in securing suitable employment. The welfare facilities of the State Office are also available to migrants and close liaison is maintained with churches and social organisations.

Immigration into Victoria

Because of interstate movements, overseas migration for a particular State can only be measured at the time of a census from information gathered on birthplace, nationality, and period of residence in Australia.

A comparison of the results of the 1966 Census with those of the 1947 Census shows clearly the contribution of immigration to Victoria's population growth. Between 1947 and 1966 the State's population grew from 2,054,701 to 3,219,526—an increase of 1,164,825. The overseas born population increased by 501,998, representing 43.1 per cent of the increase in the population of Victoria during that time. (This gain is augmented when births to migrant parents are taken into consideration.)

Of all overseas-born persons living in Australia at 30 June 1966, 31.9 per cent were living in Victoria. At 30 June 1966 one person in every five in Victoria was born outside Australia—680,598 persons in a population of 3,219,526. This is more than twice the proportion and nearly four times the number in 1947—178,600, 8.7 per cent of a population of 2,054,701. Major birthplaces of the overseas-born in 1966 were United Kingdom and Republic of Ireland 239,406, Italy 111,219, Greece 64,275, Germany 37,270, Netherlands 34,646, Malta 26,452, Poland 24,697, Yugoslavia 24,634, and New Zealand 11,683. Of the 680,598 Victorian residents born overseas, 174,427 had been in Australia for less than five years, 391,004 arrived between 1947 and 1961, and 100,583 arrived prior to 1947. (Details for the remaining 14,584 overseas-born persons are not known.)

Overseas visitors to Australia

Policy in relation to the admission of overseas visitors to Australia is administered by the Commonwealth Department of Immigration. The Department has branch offices under the control of a Commonwealth Director of Migration in the capital city of each Australian State and the Northern Territory.

Bona fide business and tourist visitors are welcome in Australia and government policy is designed to facilitate their travel by keeping to a minimum the formalities for obtaining visas where these are required. British Europeans traditionally have had freedom of movement to Australia and do not require visas.

Visitor visas are available from Australian representatives abroad as a rule within 24 hours of receipt of completed applications. Visas are granted normally for initial periods of stay of three months but extensions up to a maximum of twelve months may be granted after arrival to persons whose continued *bona fides* as visitors are not in doubt. In many cases, particularly where businessmen are concerned, multiple entries may be made on the one visa. Persons wishing to enter Australia temporarily for periods in excess of twelve months would not normally be considered under visitor policy, but under a policy relating to admission for temporary residence.

Overseas arrivals and departures

Details of overseas arrivals and departures during the years 1966 to 1970 are shown in the following tables:

AUSTRALIA—OVERSEAS ARRIVALS AND DEPARTURES BY STATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
ARRIVALS									
1966	369,679	94,276	39,188	10,095	39,565	185	4,603	(a)	557,591
1967	428,797	95,852	51,874	6,963	47,536	281	5,418	449	637,170
1968	558,512	82,452	60,264	7,175	56,360	421	6,393	215	771,792
1969	676,452	79,955	66,528	7,264	59,736	79	8,744	100	898,858
1970	744,396	115,204	77,886	7,086	70,392	144	11,165	402	1,026,675
DEPARTURES									
1966	331,993	58,667	39,362	9,019	26,776	317	4,531	(a)	470,665
1967	386,130	60,393	51,668	8,222	32,697	346	5,480	325	545,261
1968	493,290	58,956	51,698	7,912	40,213	310	6,128	232	658,739
1969	584,574	60,600	60,371	8,792	46,388	291	8,546	250	769,812
1970	658,150	88,875	82,237	6,443	56,143	347	11,354	252	903,801

NOTE. The above table indicates the State or Territory where passengers disembarked from or embarked on the ship or aircraft. Because numbers of passengers use interstate transport to commence or complete their journey the figures do not indicate the precise effect on the population of the States of movements to and from overseas countries.

(a) Included with New South Wales.

AUSTRALIA AND VICTORIA—OVERSEAS MIGRATION

Year	Australia					Victoria (a)				
	Permanent and long-term movement (b)		Short-term movement		Total	Permanent and long term movement (b)	Short-term movement		Total	
	Settlers	Other	Australian residents returning or departing temporarily	Visitors			Australian residents returning or departing temporarily	Visitors		
ARRIVALS										
1966	141,033	47,526	181,770	187,262	557,591	55,254	23,230	15,792	94,276	
1967	135,019	57,292	223,038	221,821	637,170	54,409	24,800	16,643	95,852	
1968	159,270	59,860	252,773	299,889	771,792	44,443	22,029	15,980	82,452	
1969	183,416	65,175	288,990	361,277	898,858	39,394	22,104	18,457	79,955	
1970	185,325	73,293	351,929	416,128	1,026,675	51,460	87,344	26,403	115,204	
DEPARTURES										
1966	18,343	74,285	183,161	194,876	470,665	20,822	23,478	14,367	58,667	
1967	22,302	73,451	217,746	231,762	545,261	20,071	24,482	15,840	60,393	
1968	23,814	71,864	251,880	311,181	658,739	19,096	23,845	16,015	58,956	
1969	24,739	83,521	288,805	372,747	769,812	18,177	24,533	17,890	60,600	
1970	26,756	93,480	352,526	431,039	903,801	21,771	41,882	25,222	88,875	

(a) See note to preceding table.

(b) "Permanent and long-term movement" relates to persons arriving who state that they intend to reside in Australia permanently or for a period of one year or more, and to persons departing who state that they intend to reside abroad permanently or for a period of one year or more.

Citizenship and naturalisation

The *Nationality and Citizenship Act* 1948 commenced on Australia Day (26 January) 1949 and repealed all previous Commonwealth legislation on this subject. The most significant effect of the Act was the creation for the first time of the status of "Australian citizen". In this respect the Act was complementary to citizenship legislation passed or about to be passed by other countries of the British Commonwealth. All Australian citizens, and the citizens of other countries of the British Commonwealth, are declared to be British subjects. Australian citizenship was automatically

acquired as from 26 January 1949 by persons who were British subjects at that date and who either :

1. were born in Australia or New Guinea ; or
2. were naturalised in Australia ; or
3. had been residing in Australia during the five years immediately preceding 26 January 1949 ; or
4. were born outside Australia of fathers to whom 1 or 2 above applied (provided the persons concerned had entered Australia without being placed under any immigration restriction) ; or
5. were women who had been married to men who became Australian citizens under the above headings (provided that the women concerned had entered Australia prior to 26 January 1949 without being placed under immigration restriction).

For the purposes of the Act, "Australia" includes the Territories of the Commonwealth that are not Trust Territories. On 4 June 1969 the Nationality and Citizenship Act became the *Citizenship Act 1949-1969*.

Australian citizenship may now be acquired in the following ways :

1. By birth in Australia.
2. By birth outside Australia. In such cases citizenship is acquired through the registration of the birth at an Australian consulate. Births may be registered if, at the time of the child's birth, the father was an Australian citizen or in the case of a child born out of wedlock if the mother was an Australian citizen.
3. By registration. Australian citizenship may be granted to citizens of other Commonwealth countries and Irish citizens who, after one year of residence in Australia, satisfy the Minister that they comply with specified requirements relating to good character and intention to reside in Australia.
4. By notification. Citizens of other Commonwealth countries specified in section 7 (2) of the Act may acquire Australian citizenship, as of right, by the simple process of notification provided they have lived in Australia for five years, have resident status, and are not liable to deportation.
5. By naturalisation. Australian citizenship may be granted to aliens and protected persons who can comply with the requirements of the Act. Generally the Act requires an applicant to have lived here for 5 years, to be of good character, to have an adequate knowledge of English and other responsibilities and privileges of Australian citizenship, as well as an intention to continue to reside here. Persons who are able to read and write English proficiently may be granted citizenship after three years residence. Persons who have either voluntarily enlisted in the Commonwealth Forces or who are called up for National Service may be granted Australian citizenship after three months service or upon discharge if discharged earlier on medical grounds attributable to that service.

Under the Act, the independence of married women in nationality matters is recognised, and marriage does not affect a woman's nationality. Alien women who marry Australian citizens may, however, be naturalised under easier conditions than those which apply to other aliens.

The following table shows the persons of each nationality granted naturalisation certificates in Victoria during the five years 1966 to 1970 :

VICTORIA—PREVIOUS NATIONALITY OF PERSONS NATURALISED

Nationality	Number of naturalisation certificates granted					Total granted 1966 to 1970	
	1966	1967	1968	1969	1970	Number	Per cent
Albanian	15	20	10	7	6	58	0.10
Austrian	175	269	183	136	108	871	1.46
Belgian	13	40	12	21	14	100	0.17
Bulgarian	14	18	14	7	14	67	0.11
Byelorussian	15	16	5	6	1	43	0.07
Chinese	106	332	237	177	110	962	1.61
Czechoslovak	56	52	45	35	64	252	0.42
Danish	26	40	29	23	4	122	0.20
Dutch	1,047	1,495	1,138	764	525	4,969	8.31
Estonian	27	21	16	9	2	75	0.11
Finnish	36	64	67	50	44	261	0.44
French	35	52	39	50	37	213	0.36
German	890	1,320	990	595	387	4,182	6.99
Greek	1,322	2,853	2,852	2,943	3,052	13,022	21.78
Hungarian	446	564	328	238	145	1,721	2.88
Israeli	67	160	148	83	62	520	0.87
Italian	3,296	5,742	3,549	2,763	2,228	17,578	29.40
Japanese	11	10	8	3	3	40	0.07
Latvian	122	147	72	36	35	412	0.69
Lebanese	31	70	70	87	113	371	0.62
Lithuanian	63	48	35	24	17	177	0.31
Norwegian	16	15	12	10	4	57	0.09
Polish	626	1,028	734	477	481	3,346	5.60
Romanian	24	57	23	20	34	158	0.26
Russian	98	152	137	96	59	542	0.91
Spanish	22	40	68	95	65	290	0.48
Swedish	13	15	5	11	9	53	0.09
Swiss	31	56	51	31	45	214	0.36
Turkish	11	15	6	18	19	69	0.12
Ukrainian	160	158	71	67	30	486	0.82
United Arab Republic	8	21	94	199	334	656	1.10
U.S. American	20	38	26	27	27	138	0.23
Yugoslav	946	1,907	1,591	1,235	1,212	6,891	11.52
Other nationalities	22	75	75	83	147	402	0.67
Stateless	59	122	92	100	94	467	0.78
Total	9,869	17,032	12,832	10,531	9,531	59,795	100.00

NOTE. The above figures relate to the number of certificates granted, and do not represent the total number of persons affected by the certificates. In addition to the figures shown, there were 1,330 children in 1966, 1,974 in 1967, 1,523 in 1968, 1,229 in 1969, and 1,123 in 1970 affected by grant of certificates.

Aboriginals in Victoria

On 1 January 1968 the Ministry of Aboriginal Affairs succeeded the former Aborigines Welfare Board. The Ministry, which has assumed all the responsibilities of the former Board, is headed by a Director who is also the permanent head.

At the 1966 Population Census the number of persons who described themselves as being 50 per cent or more Aboriginal or simply as "Aboriginal" was 1,790. Their main districts of residence were Shepparton-Mooroopna, Echuca, Swan Hill, Robinvale, Horsham-Dimboola, Heywood-Portland, Warrnambool-Purnim, Drouin-Warragul, La Trobe Valley, East Gippsland, Healesville, and the Melbourne metropolitan area.

A few Aboriginals are self-employed or follow skilled trades. Some follow semi-skilled occupations where skill is learned on the job without formal training, but the majority are unskilled labourers or casual or itinerant workers. Few Aboriginals are employed as pastoral workers or farm hands, but many work on farms as pickers and harvesters for short periods during the summer.

The policy of the Ministry of Aboriginal Affairs of consulting Aboriginals has resulted in Aboriginals assuming more responsibility in their own affairs. The Aboriginal Affairs Advisory Council, in which eight out of twelve

members are Aborigines, is becoming increasingly effective in conveying Aboriginal opinion to the Minister. The Aboriginal committees established in some rural areas are becoming the focal points of Aboriginal opinion and action in these areas. The Committee of Management and the administration of two non-government organisations in Victoria are in the hands of Aborigines, a situation welcomed by the Ministry.

The Ministry considers it undesirable that Aborigines are invariably associated with welfare. Accordingly emphasis in the work of the Ministry is placed on disseminating information to the non-Aboriginal community to achieve a better understanding of the potential contribution which Aborigines can make to the life of the community in Victoria. This improvement in understanding Aborigines will result in better opportunities for them.

During 1969-70 Aboriginal home ownership was encouraged by means of a grant of \$1,500 towards the deposit on a house. During the year twenty-five Aborigines made use of this offer. As a result of this scheme and of the Ministry policy of encouraging Aborigines to use community resources, the number of houses provided by the Ministry for rental has decreased. This number stood at 165 on 30 June 1969, while Aboriginal tenants of the Housing Commission of Victoria receiving assistance to pay their rent from the Ministry was 178 at the same date.

During 1970 legislation was initiated to return Reserves at Framlingham and Lake Tyers to the Aboriginal residents. Aboriginal ownership of these Reserves is the first recognition by an Australian government of Aboriginal land rights. The Ministry provides the Aborigines on these Reserves with consultative and advisory services as they are requested.

In 1969-70 government expenditure on Aboriginal Affairs was \$779,756 excluding grants from Commonwealth Government sources.

VITAL STATISTICS

Introduction

Registration of births, deaths, and marriages

The system of compulsory registration of births, deaths, and marriages in Victoria has been in force since 1853, and the registers contain all necessary information bearing on the family history of the people. The statutory duties under the Registration Act are performed by the Government Statist, who has supervision over registration officers, registrars of marriages, and (relating to their registration duties) the clergymen who celebrate marriages. Copies of entries certified by the Government Statist or by an Assistant Government Statist or an authorised registration officer are *prima facie* evidence in the Courts of Australia of the facts to which they relate. At the Government Statist's Office (295 Queen Street) there is kept for reference a complete collection of all registrations effected since 1 July 1853, as well as originals or certified copies of all existing church records relating to earlier periods, as far back as 1837.

Law relating to births, deaths, and marriages

The various Acts relating to the registration of births, deaths, and marriages in Victoria were consolidated in 1958.

In November 1959 a Bill was placed before Parliament to reorganise the system of registration of births and deaths in Victoria. This new legislation, known as the *Registration of Births, Deaths, and Marriages Act 1959*, which came into operation on 1 October 1960, was designed to allow registrations of births and deaths to be effected by post instead of through those persons who previously held office as Registrars of Births and Deaths. No alteration, however, was made to the system of registration of marriages. In 1961 the Commonwealth Parliament passed the *Marriage Act 1961*. A few minor provisions (relating mainly to certain extensions of the application of the prohibited degrees) came into operation on the date the Act received the Royal Assent (6 May 1961), and the remainder of the Act came into operation on 1 September 1963. On this date the Act superseded the marriage laws of all the States, the two mainland Territories, and Norfolk Island.

The principal numbers and rates relating to vital statistics in Victoria from 1966 to 1970 are given in the following table :

VICTORIA—SUMMARY OF VITAL STATISTICS

Year	Number of—				Rate per 1,000 of mean population			Infant mortality
	Marriages	Live births	Deaths	Infant deaths (a)	Marriages	Live births	Deaths	Deaths under one year per 1,000 live births
1966	27,089	64,008	28,673	1,116	8.41	19.87	8.90	17.4
1967	28,004	65,485	28,373	1,101	8.55	19.98	8.66	16.8
1968	29,724	70,228	29,967	1,010	8.93	21.10	9.01	14.4
1969	30,860	71,035	28,976	1,066	9.11	20.97	8.55	15.0
1970	31,729	73,019	30,335	1,060	9.20	21.17	8.79	14.5

(a) Included in deaths.

Marriages

Marriages in Victoria in 1970 numbered 31,729, an increase of 869 on the number registered in 1969. The rate per 1,000 of mean population in 1970 was 9.20, compared with a rate of 9.11 in 1969. The highest rate ever recorded in Victoria was 12.06 in 1942, and the lowest 5.66 in 1931.

The following tables show the number of marriages and the marriage rate per 1,000 of mean population in the Australian States and Territories for each of the five years 1966 to 1970 and relative ages of bridegrooms and brides for Victoria in 1970:

AUSTRALIA—NUMBER OF MARRIAGES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1966	35,575	27,089	13,325	9,051	7,001	2,946	312	747	96,046
1967	37,077	28,004	13,634	9,434	7,430	3,213	325	883	100,000
1968	39,213	29,724	14,860	9,652	8,086	3,426	419	965	106,345
1969	41,286	30,860	15,669	10,399	8,993	3,532	413	1,118	112,470
1970	42,928	31,729	16,082	10,864	9,227	3,535	500	1,200	116,065

AUSTRALIA—MARRIAGE RATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory (a)	Australian Capital Territory (a)	Australia
1966	8.40	8.41	8.01	8.29	8.36	7.93	8.3	7.7	8.31
1967	8.60	8.55	8.01	8.49	8.47	8.53	5.4	8.5	8.46
1968	8.94	8.93	8.57	8.57	8.89	8.96	6.5	8.6	8.83
1969	9.22	9.11	8.86	9.26	9.49	9.09	6.1	9.1	9.14
1970	9.38	9.20	8.93	9.32	9.39	9.00	7.0	9.0	9.23

(a) Based on too few events to warrant calculation to second place of decimals.

VICTORIA—RELATIVE AGES OF BRIDEGROOMS AND BRIDES, 1970

Ages of bridegrooms (a) (years)	Ages of brides (a) (years)														Total bridegrooms
	14	15	16	17	18	19	20	21 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 and over	
16	2	1	1	..	1	..	..	..	..	..	..	..	5
17	10	17	13	..	1	..	..	..	..	..	..	..	50
18	..	3	91	168	167	76	44	37	3	..	..	..	..	..	589
19	..	1	108	266	341	287	149	132	8	2	..	..	..	..	1,294
20	..	1	7	115	289	443	547	391	19	2	..	..	..	..	2,244
21 to 24	1	9	195	476	1,285	2,413	3,003	7,356	624	50	9	2	..	..	15,423
25 to 29	41	111	272	517	732	3,744	1,390	211	41	7	4	..	7,070
30 to 34	4	8	26	68	87	674	653	296	87	34	9	..	1,950
35 to 39	2	3	11	9	137	236	234	143	56	29	11	871
40 to 44	1	..	3	6	41	109	139	131	113	59	37	639
45 to 49	1	1	1	19	33	55	78	97	109	56	450
50 to 54	3	14	27	35	70	79	99	327
55 to 59	3	5	9	11	24	68	159	279
60 to 64	3	1	7	17	28	163	219
65 and over	3	5	4	16	291	319
Total brides	2	20	566	1,339	2,552	3,928	4,463	12,541	3,097	1,029	547	424	401	820	31,729

(a) The marriage of bridegrooms under 18 years and brides under 16 years of age is restricted by the provisions of the *Marriage Act* 1961. See page 140.

Of every 1,000 men who married during 1970, 763 were older and 128 were younger than their brides, and 109 were of the same age. In 1970 the oldest bridegroom was aged 90 years and the oldest bride was aged 82 years.

VICTORIA—PERCENTAGES OF BRIDEGROOMS AND BRIDES IN AGE GROUPS, 1970

Age group (years)	Percentage of total		Age group (years)	Percentage of total	
	Bridegrooms	Brides		Bridegrooms	Brides
14	..	(a)	30 to 34	6.1	3.2
15	..	0.1	35 to 39	2.7	1.7
16	(a)	1.8	40 to 44	2.0	1.3
17	0.2	4.2	45 to 49	1.4	1.3
18	1.9	8.0	50 to 54	1.0	0.8
19	4.1	12.4	55 to 59	0.9	0.7
20	7.1	14.1	60 and over	1.7	1.1
21 to 24	48.6	39.5			
25 to 29	22.3	9.8	Total	100.0	100.0

(a) Less than 0.1.

VICTORIA—MARRIAGES OF MINORS

Year	Age in years							Total	
	14	15	16	17	18	19	20	Number	Percentage of total marriages
BRIDEGROOMS									
1966	..	..	3	32	499	1,303	1,467	3,304	12.20
1967	..	..	..	36	479	1,204	1,798	3,517	12.56
1968	..	..	1	50	512	1,171	1,919	3,653	12.29
1969	..	..	1	36	517	1,242	1,937	3,733	12.10
1970	..	..	5	50	589	1,294	2,244	4,182	13.18
BRIDES									
1966	2	24	530	1,105	2,162	3,488	3,529	10,840	40.02
1967	4	23	479	1,138	2,118	3,283	4,291	11,336	40.48
1968	2	17	540	1,227	2,303	3,373	4,079	11,541	38.83
1969	1	18	495	1,192	2,577	3,506	4,200	11,989	38.85
1970	2	20	566	1,339	2,552	3,928	4,463	12,870	40.56

A feature of Victorian marriages since the end of the Second World War has been the increase in the proportion of marriages which involve minors. In 1947, 4.82 per cent of bridegrooms and 22.94 per cent of brides were under 21 years of age. In 1970 these percentages were 13.18 and 40.56, respectively, and in 11.30 per cent of marriages both parties were under 21 years of age.

VICTORIA—MEAN AGE AT MARRIAGE

Year	Bridegrooms				Brides			
	Bachelors	Widowers	Divorced	All bridegrooms	Spinsters	Widows	Divorced	All brides
1966	25.4	56.4	41.2	27.2	22.4	50.2	38.4	24.1
1967	25.3	56.3	41.6	27.0	22.4	50.3	38.0	24.1
1968	25.1	57.1	41.6	26.9	22.3	50.7	37.7	24.0
1969	24.8	56.8	41.0	26.7	22.3	50.5	37.5	23.9
1970	24.7	57.3	40.6	26.5	22.2	50.2	37.1	23.8

In general terms, the age in relation to which approximately half the number of bachelors was younger, and approximately half was older (the median age), was 23.6 years. The corresponding age for spinsters was 21.4 years. More bachelors were married at 23 years and spinsters at 21 years (the modal ages) than at any other age.

The following tables show the number of persons in each conjugal condition marrying from 1966 to 1970 and the proportions in each condition for periods since 1940 :

VICTORIA—CONJUGAL CONDITION OF PERSONS MARRYING

Period	Bridegrooms			Brides			Total marriages
	Bachelors	Widowers	Divorced	Spinsters	Widows	Divorced	
1966	24,834	915	1,340	24,773	918	1,398	27,089
1967	25,786	845	1,373	25,704	931	1,369	28,004
1968	27,248	899	1,577	27,192	954	1,578	29,724
1969	28,308	965	1,587	28,324	1,023	1,513	30,860
1970	29,191	909	1,629	29,163	984	1,582	31,729

VICTORIA—TOTAL MARRIAGES IN 1970 AND PERCENTAGE OF PERSONS
MARRYING IN EACH CONJUGAL CONDITION, 1940 TO 1970

Marriages between—	1970		Conjugal condition	Percentage of total—			
	Number	Percentage		1940-49	1950-59	1960-69	1970
BRIDEGROOMS							
Bachelors and spinsters	28,031	88.4	Bachelors	90.5	89.5	91.6	92.0
Bachelors and widows	299	1.0	Widowers	4.9	4.5	3.4	2.9
Bachelors and divorced women	861	2.7	Divorced	4.6	6.0	5.0	5.1
Widowers and spinsters	236	0.7	Total	100.0	100.0	100.0	100.0
Widowers and widows	480	1.5					
Widowers and divorced women	193	0.6	BRIDES				
Divorced men and spinsters	896	2.8	Spinsters Widows Divorced	91.4 3.9 4.7	89.2 4.4 6.4	91.2 3.6 5.2	91.9 3.1 5.0
Divorced men and widows	205	0.6					
Divorced men and divorced women	528	1.7					
Total marriages	31,729	100.0	Total	100.0	100.0	100.0	100.0

In 1970 the number of marriages celebrated by ministers of religion was 29,250 representing 92 per cent of the total marriages. Civil marriages numbered 2,479 or 8 per cent of the total.

VICTORIA—MARRIAGES, RELIGIOUS AND CIVIL, 1970

Category of celebrant	Number	Proportion of total marriages
Ministers of religion :		
Recognised denominations (a)—		
Roman Catholic Church	9,497	29.93
Church of England in Australia	7,278	22.94
The Presbyterian Church of Australia	4,816	15.18
The Methodist Church of Australasia	3,353	10.57
Orthodox Church (b)	1,406	4.43
The Baptist Union of Australia	524	1.65
Churches of Christ in Australia	520	1.64
Congregational Union of Australia	390	1.23
Lutheran Church (b)	306	0.96
Jewry	283	0.89
Unitarians	198	0.62
The Salvation Army	172	0.54
Seventh-day Adventist Church	65	0.21
Jehovah's Witnesses	52	0.16
The Church of Jesus Christ of Latter-Day Saints	46	0.15
Christian Brethren	39	0.12
Other recognised denominations	135	0.43
Other ministers	170	0.54
Total ministers of religion	29,250	92.19
Civil officers	2,479	7.81
Total marriages	31,729	100.00

(a) Under authority of the Commonwealth *Marriage Act* 1961.

(b) Includes churches grouped under this heading in the proclamation made under the Commonwealth *Marriage Act* 1961.

The following table shows the number of civil marriages and proportion to total marriages performed for each of the five years 1966 to 1970. The number of civil marriages performed in the Office of the Government Statist and the proportion of these to total civil marriages are also shown.

VICTORIA—CIVIL MARRIAGES

Year	Total civil marriages		Performed in the Office of the Government Statist	
	Number	Percentage of total marriages	Number	Percentage of total civil marriages
1966	2,161	7.98	1,850	85.61
1967	2,203	7.87	1,846	83.79
1968	2,337	7.87	1,942	83.10
1969	2,376	7.70	2,041	85.90
1970	2,479	7.81	2,070	83.50

Divorce

Until the operation of the *Matrimonial Causes Act* 1959 from 1 February 1961, the law in Victoria in regard to divorce was contained in the *Marriage Act* 1958. As the new Act introduced changes in provisions on divorce, figures since the date of operation of the Commonwealth Act may not be comparable with those of earlier years.

The following table gives the number of petitions filed by husbands and wives, respectively, and the number of dissolutions of marriage and nullities of marriage granted during the year 1970. Every decree of dissolution of marriage is in the first instance a decree *nisi* and is generally not made absolute until the expiration of not less than three months thereafter.

VICTORIA—DIVORCE, 1970

Petition for—	Petitions filed by—			Decrees granted to—		
	Husbands	Wives	Total	Husbands	Wives	Total
Dissolution	(a)1,484	(b)2,191	3,675	988	1,593	(c)2,591
Nullity	3	11	14	..	13	13
Judicial separation	1	1	2	..	..	..
Total	1,488	2,203	3,691	988	1,606	(c)2,604

(a) Includes five petitions for dissolution or nullity.

(b) Includes nine petitions for dissolution or nullity.

(c) Includes ten petitions granted to both parties of the marriage.

VICTORIA—DIVORCE: PETITIONS FILED AND DECREES GRANTED :
DISSOLUTION, NULLITY, AND JUDICIAL SEPARATION

Year	Petitions filed			Decrees granted		
	Dissolution (a)	Nullity	Judicial separation	Dissolution	Nullity	Judicial separation
1966	2,630	14	1	2,131	11	2
1967	2,714	16	2	2,039	15	..
1968	2,787	10	6	2,515	10	..
1969	3,058	9	1	2,220	15	..
1970	3,675	14	2	2,591	13	..

(a) Includes nine petitions for dual relief in 1966, fourteen in 1967, sixteen in 1968, nine in 1969, and fourteen in 1970.

VICTORIA—GROUNDS FOR DIVORCE, 1970

Grounds on which granted	Dissolution		Nullity	
	Husbands' petitions	Wives' petitions	Husbands' petitions	Wives' petitions
Adultery	401	425	..	..
Adultery and desertion	3	8	..	..
Cruelty	2	36	..	..
Desertion	403	758	..	..
Separation	175	333	..	..
Desertion and separation	1	2	..	..
Other grounds	3	31	..	13
Total	988	1,593	..	13

NOTE. In addition to the above there were ten instances where dissolutions were granted to both parties.

VICTORIA—DIVORCE DECREES GRANTED: AGES OF PETITIONERS (AT DATE OF DECREE) AND ISSUE, 1970

Ages of petitioners (years)	Dissolution (a)		Nullity		Number of children (a)	
	Husbands' petitions	Wives' petitions	Husbands' petitions	Wives' petitions	Husbands' petitions	Wives' petitions
Under 20	..	..	..	..	..	..
20-24	26	130	..	2	17	102
25-29	165	335	..	3	140	388
30-34	190	276	..	3	227	474
35-39	155	215	..	2	268	472
40-44	142	237	..	1	262	497
45-49	117	189	..	..	176	219
50-54	83	102	..	..	82	76
55-59	56	71	..	..	24	32
60 and over	54	38	..	2	16	4
Total	988	1,593	..	13	1,212	2,264

(a) Of the total of 3,476 children shown above, four children were the issue of marriages for which nullities were granted. In addition to the above there were ten instances involving a total of nine children where dissolutions were granted to both parties.

VICTORIA—DISSOLUTIONS OF MARRIAGE: DECREES GRANTED: AGES OF PARTIES AT DATE OF DECREE, 1970

Ages of husbands (years)	Ages of wives (years)										Total husbands
	Under 21	21-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60 and over	
21-24	4	53	7	2	..	..	..	..	..	..	66
25-29	3	144	243	18	3	..	1	..	..	..	412
30-34	..	30	244	191	18	1	1	..	..	..	485
35-39	..	7	38	169	140	33	2	..	1	..	390
40-44	..	..	12	52	130	160	37	4	1	..	396
45-49	..	..	3	14	37	134	134	33	2	2	359
50-54	..	..	..	1	14	23	91	57	22	4	212
55-59	..	..	..	1	2	8	25	45	45	5	131
60 and over	..	..	..	..	..	4	14	24	34	59	135
Total wives	7	234	547	448	344	363	305	163	105	70	(a) 2,586

(a) Excludes two petitions where the ages of the wives were not stated but the ages of the husbands were 51 and 58, and excludes three petitions where the ages of the husbands were not stated, but the ages of the wives were 28, 38, and 38, at time of dissolution.

**VICTORIA—DISSOLUTIONS OF MARRIAGE: DECREES GRANTED:
DURATION OF MARRIAGE AND ISSUE, 1970**

Duration of marriage (years)	Number of children							Total dissolutions	Total children (a)
	0	1	2	3	4	5	6 and over		
1	5	..	..	..	..	..	..	5	..
2	11	5	..	..	..	..	..	16	..
3	39	7	..	1	1	..	..	48	14
4	81	34	6	4	..	..	..	125	58
5	82	58	22	1	1	..	1	165	115
6	74	41	20	4	1	..	..	140	97
7	41	62	37	4	1	..	..	144	148
8	45	50	39	9	1	..	..	144	159
9	30	36	47	13	1	..	..	127	173
10	28	33	42	16	4	..	..	123	181
11	31	29	38	16	5	1	1	121	184
12	22	20	29	20	10	1	..	102	183
13	21	16	31	20	11	..	..	99	182
14	15	13	16	19	3	..	3	70	139
15-19	69	70	124	71	42	12	9	397	823
20-24	57	72	107	75	37	8	8	364	749
25-29	105	56	42	18	5	1	..	227	219
30-34	80	20	8	2	..	..	1	111	48
35-39	40	1	..	1	..	..	..	42	4
40 and over	21	..	..	..	..	..	..	21	..
Total dissolutions of marriage	897	623	608	294	122	24	23	2,591	..
Total children	..	623	1,216	882	488	120	152	..	3,481

(a) Of the total of 3,481 children, nine children were the issue of marriages for which dissolutions were granted to both parties.

Births

The number of births registered in Victoria during the year 1970 was 73,019.

Stillbirths, which are excluded from births and deaths, numbered 782 and corresponded to a ratio of 10.60 per 1,000 births live and still in 1970. The compulsory registration of stillborn children became effective in 1953.

The following tables show the number of births and rates per 1,000 of mean population in each State and Territory from 1966 to 1970:

AUSTRALIA—NUMBER OF BIRTHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1966	77,758	64,008	32,843	20,319	17,007	7,401	972	2,318	222,626
1967	78,841	65,485	34,692	20,386	18,023	7,547	1,921	2,401	229,296
1968	81,696	70,228	35,190	21,207	19,541	8,317	2,084	2,643	240,906
1969	86,036	71,035	36,576	21,977	20,754	8,445	2,274	3,079	250,176
1970	88,448	73,019	37,530	22,617	21,618	8,185	2,624	3,475	257,516

AUSTRALIA—BIRTH RATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory (a)	Australian Capital Territory (a)	Australia
1966	18.35	19.87	19.74	18.62	20.31	19.92	25.9	24.0	19.27
1967	18.30	19.98	20.38	18.34	20.55	20.04	32.3	23.1	19.40
1968	18.62	21.10	20.30	18.83	21.47	21.76	33.4	23.4	20.00
1969	19.21	20.97	20.67	19.19	21.91	21.73	33.3	25.2	20.33
1970	19.33	21.17	20.83	19.41	21.99	20.83	36.5	26.0	20.48

(a) Based on too few events to warrant calculation to second place of decimals.

The following table shows the number of births by sex, the ratio of male to female births, and the average ages of parents, in each year from 1966 to 1970 :

VICTORIA—BIRTHS BY SEX, MASCULINITY, AVERAGE AGE OF FATHER AND MOTHER

Year	Males	Females	Total	Masculinity (a)	Average age (b)	
					Father	Mother
1966	32,782	31,226	64,008	104.98	30.8	27.3
1967	33,529	31,956	65,485	104.92	30.6	27.2
1968	36,145	34,083	70,228	106.05	30.3	27.0
1969	36,421	34,614	71,035	105.22	30.2	27.0
1970	37,350	35,669	73,019	104.71	30.1	26.9

(a) Number of male births per 100 female births.

(b) Average age of father and mother of nuptial children only.

The following tables relating to confinements show age group of mother together with previous issue, average issue, relative age of father, and duration of marriage:

VICTORIA—NUPTIAL CONFINEMENTS : AGE GROUP OF MOTHER AND PREVIOUS ISSUE, 1970

Age group of mother (years)	Number of married mothers with previous issue numbering—										Total married mothers	
	0	1	2	3	4	5	6	7	8	9		10 and over
Under 20	3,979	753	58	2	..	..	..	..	..	..	..	4,792
20-24	12,555	8,022	2,150	493	99	16	3	..	..	..	..	23,338
25-29	6,149	8,548	5,223	1,948	640	202	74	17	2	1	..	22,804
30-34	1,449	2,756	2,999	2,012	984	507	187	81	41	13	9	11,038
35-39	449	751	861	886	646	394	224	127	88	47	44	4,517
40-44	97	157	189	208	180	140	95	83	50	38	53	1,290
45-49	7	5	6	13	6	8	11	4	2	4	5	71
Age not stated	3	1	2	..	..	..	..	..	..	..	..	6
Total	24,688	20,993	11,488	5,562	2,555	1,267	594	312	183	103	111	67,856
Proportion of total married mothers	36.38	30.94	16.93	8.20	3.76	1.87	0.88	0.46	0.27	0.15	0.16	100.00

**VICTORIA—NUPTIAL CONFINEMENTS:
NUMBER OF MOTHERS IN AGE GROUPS,
TOTAL ISSUE, AND AVERAGE ISSUE, 1970**

Age group of mother (years)	Number of mothers	Total issue	Average issue
Under 20	4,792	5,691	1.19
20-24	23,338	37,829	1.62
25-29	22,804	52,078	2.28
30-34	11,038	34,688	3.14
35-39	4,517	18,118	4.01
40-44	1,290	6,368	4.94
45-49	71	391	5.51
Age not stated	6	11	1.83
Total	67,856	155,174	2.29

**VICTORIA—NUPTIAL CONFINEMENTS ; RELATIVE AGE GROUPS OF
PARENTS, 1970**

Age group of father (years)	Age group of mother (years)								Total fathers
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	Not stated	
Under 20	741	150	2	2	..	..	..	..	895
20-24	3,302	9,346	818	45	3	..	..	..	13,514
25-29	625	10,869	10,985	843	49	8	..	3	23,382
30-34	100	2,475	8,545	4,955	458	22	2	1	16,558
35-39	16	375	1,935	3,827	1,944	171	2	..	8,270
40-44	2	75	397	1,080	1,530	602	12	1	3,699
45-49	1	18	85	209	431	378	35	..	1,157
50 and over	1	9	22	64	98	107	20	..	321
Not stated	4	21	15	13	4	2	..	1	60
Married mothers	4,792	23,338	22,804	11,038	4,517	1,290	71	6	67,856

**VICTORIA—NUPTIAL FIRST BIRTHS : AGE GROUP OF MOTHER AND
DURATION OF MARRIAGE, 1970**

Age group of mother (years)	Duration of marriage																	Total nuptial first births
	Months											Years						
	0	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5 and over	
Under 20	47	67	146	248	450	825	802	275	103	108	109	121	577	83	18	..	..	3,979
20-24	42	52	85	155	296	641	724	335	279	575	534	487	4,217	2,469	1,147	393	124	12,555
25-29	12	5	15	30	40	69	94	43	97	182	156	144	1,263	1,182	1,079	830	908	6,149
30-34	3	7	7	6	13	17	19	26	39	67	61	40	347	179	132	104	382	1,449
35-39	..	1	3	1	8	8	6	10	12	33	12	17	87	51	44	23	133	449
40-44	..	..	1	1	1	1	..	..	1	4	1	1	25	17	9	7	28	97
45-49	..	..	..	..	..	..	..	..	..	..	1	..	1	3	..	..	2	7
Not stated	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	3
Total	104	132	257	441	808	1,561	1,645	689	531	969	874	810	6,518	3,985	2,429	1,357	1,578	24,688

On the average of the five years 1966 to 1970, mothers of twins were one in 93 of all mothers whose confinements were recorded, mothers of triplets one in 8,503, and mothers of all multiple births one in 92 mothers.

VICTORIA—MULTIPLE CONFINEMENTS (a)

Year	Cases of twins	Cases of triplets	Total multiple cases	Multiple cases per 1,000 of total confinements
1966	714	7	721	11.39
1967	691	11	(b)703	10.85
1968	730	5	735	10.57
1969	742	7	(c)751	11.34
1970	772	10	(b)783	10.84

(a) Excludes confinements where the births were of stillborn children only.

(b) Includes one case of quadruplets.

(c) Includes two cases of quadruplets.

The following tables show details of ex-nuptial births in each State and Territory for the years 1966 to 1970 and the ages of mothers of ex-nuptial children in Victoria:

AUSTRALIA—EX-NUPTIAL BIRTHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1966	6,024	3,578	3,227	1,372	1,607	524	135	74	16,541
1967	6,300	3,699	3,525	1,375	1,944	562	259	70	17,734
1968	6,622	4,166	3,756	1,558	2,014	657	312	86	19,171
1969	6,860	4,098	3,835	1,508	2,231	647	315	91	19,585
1970	7,455	4,420	4,251	1,715	2,316	650	426	134	21,367

AUSTRALIA—EX-NUPTIAL BIRTHS: PERCENTAGE OF TOTAL BIRTHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1966	7.75	5.59	9.83	6.75	9.45	7.08	13.89	3.19	7.43
1967	7.99	5.65	10.16	6.74	10.79	7.45	13.48	2.92	7.73
1968	8.11	5.93	10.67	7.35	10.31	7.90	14.97	3.25	7.96
1969	7.97	5.77	10.49	6.86	10.75	7.66	13.85	2.96	7.83
1970	8.43	6.05	11.33	7.58	10.71	7.94	16.23	3.86	8.30

VICTORIA—AGES OF MOTHERS OF EX-NUPTIAL CHILDREN

Age of mother (years)	1966	1967	1968	1969	1970
12	..	1	1	..	1
13	4	..	1	1	5
14	21	11	10	17	11
15	79	70	66	69	95
16	178	207	200	194	228
17	328	320	396	344	419
18	381	417	477	446	507
19	413	401	475	448	525
20	271	373	386	360	410
21-24	778	823	952	990	962
25-29	478	502	553	575	590
30-34	290	283	320	314	320
35-39	219	179	194	212	218
40-44	93	56	81	81	83
45 and over	6	12	10	4	4
Not stated	..	3	1	7	4
Total	3,539	3,658	4,123	4,062	4,382

Adoption of children

Provision for the legal adoption of children and the registration of each adoption are contained in the Adoption of Children Act.

The following table shows the number of legal adoptions (male and female) from 1966 to 1970 :

VICTORIA—CHILDREN LEGALLY ADOPTED

Period	Number of children adopted	
	Males	Females
1966	835	786
1967	1,011	1,057
1968	939	893
1969	1,052	1,073
1970	1,136	1,011

Legitimations registered

Until the operation of the Commonwealth *Marriage Act* 1961 on 1 September 1963, provision for the legitimation of children was contained in the Victorian *Registration of Births, Deaths, and Marriages Act* 1959. Legitimations registered under the provisions of the new Act numbered 601 in 1970.

Deaths

The following tables show the number of deaths and the death rates per 1,000 of the mean population in each of the Australian States and Territories for each of the five years 1966 to 1970 :

AUSTRALIA—NUMBER OF DEATHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1966	40,546	28,673	14,861	9,323	6,772	3,159	154	441	103,929
1967	39,613	28,373	14,736	9,071	6,779	3,228	527	376	102,703
1968	41,803	29,967	16,078	9,916	7,468	3,284	543	488	109,547
1969	40,665	28,976	15,786	9,337	7,350	3,309	485	588	106,496
1970	43,601	30,335	17,055	10,138	7,543	3,174	608	594	113,048

AUSTRALIA—DEATH RATES

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory(a)	Australian Capital Territory(a)	Australia
1966	9.57	8.90	8.93	8.54	8.09	8.50	4.1	4.6	8.99
1967	9.19	8.66	8.65	8.16	7.73	8.57	8.8	3.6	8.69
1968	9.53	9.01	9.27	8.81	8.21	8.59	8.4	4.3	9.10
1969	9.08	8.55	8.92	8.15	7.76	8.51	7.1	4.8	8.65
1970	9.53	8.79	9.47	8.70	7.67	8.08	8.5	4.5	8.99

(a) Based on too few events to warrant calculation to second place of decimals.

*Causes of death**Classification*

The Eighth (1965) Revision of the International List of Causes of Death was used for the first time in 1968, replacing the Seventh (1955)

Revision which had been used from 1958 to 1967.

Major changes have been made in several sections of the International Classification of Diseases, namely, infective and parasitic diseases, mental disorders, diseases of the circulatory system, congenital malformations, diseases and conditions peculiar to the perinatal period, and the nature of injury and external causes in respect of accidents, poisonings, and violence. A summary of these changes is given on pages 152-3 of the *Victorian Year Book 1971*.

VICTORIA—CAUSES OF DEATH : NUMBERS AND RATES, 1970

Cause of death (a)	International List Numbers	Number of deaths	Proportion of total	Rate per 1,000,000 of mean population
3. Bacillary dysentery and amoebiasis	004, 006	1	(d)	(d)
4. Enteritis and other diarrhoeal diseases	008, 009	73	0.24	21
5. Tuberculosis of respiratory system	010-012	31	0.10	9
6. Other tuberculosis, including late effects	013-019	17	0.06	5
11. Meningococcal infection	036	2	0.01	1
14. Measles	055	1	(d)	(d)
17. Syphilis and its sequelae	090-097	6	0.02	2
18. All other infective and parasitic diseases	(b)	85	0.28	25
19. Malignant neoplasms—				
Digestive organs and peritoneum	150-159	1,828	6.03	530
Lung	162	883	2.91	256
Skin	172, 173	115	0.38	33
Breast	174	445	1.47	129
Genital organs	180-187	614	2.02	178
Urinary organs	188, 189	233	0.77	67
Leukaemia and aleukaemia	204-207	189	0.62	55
Other malignant and lymphatic neoplasms	(c)	869	2.86	252
20. Benign and unspecified neoplasms	210-239	47	0.15	14
21. Diabetes mellitus	250	630	2.08	183
22. Avitaminoses and other nutritional deficiency	260-269	28	0.09	8
23. Anaemias	280-285	74	0.24	21
24. Meningitis	320	20	0.07	6
25. Active rheumatic fever	390-392	2	0.01	1
26. Chronic rheumatic heart disease	393-398	269	0.89	78
27. Hypertensive disease	400-404	509	1.68	148
28. Ischaemic heart disease	410-414	8,979	29.60	2,603
29. Other forms of heart disease	420-429	1,266	4.17	367
30. Cerebrovascular disease	430-438	4,246	14.00	1,231
31. Influenza	470-474	114	0.38	33
32. Pneumonia	480-486	788	2.60	228
33. Bronchitis, emphysema and asthma	490-493	1,125	3.71	326
34. Peptic ulcer	531-533	177	0.58	51
35. Appendicitis	540-543	14	0.05	4
36. Intestinal obstruction and hernia	550-553, 560	88	0.29	25
37. Cirrhosis of liver	571	196	0.65	57
38. Nephritis and nephrosis	580-584	168	0.55	49
39. Hyperplasia of prostate	600	85	0.28	25
40. Abortion	640-645	3	0.01	1
41. Other complications of pregnancy, childbirth and the puerperium	{ 630-639 650-678 }	15	0.05	4
42. Congenital anomalies	740-759	367	1.21	106
43. Birth injury, difficult labour and other anoxic and hypoxic conditions	{ 764-768 772-776 760-763 769-771 773-775 777-779 }	258	0.85	75
44. Other causes of perinatal mortality		302	1.00	88
45. Symptoms and ill-defined conditions	780-796	74	0.24	21
General arteriosclerosis	440	899	2.96	261
Other diseases of circulatory system	441-458	425	1.40	123
46. { Other diseases of respiratory system	{ 460-466 500-519 }	250	0.82	72
All other diseases	Residual	1,173	3.87	340
47. Motor vehicle accidents	E810-E823	1,097	3.62	318
48. All other accidents	{ E800-E807 E825-E949 }	744	2.45	216
49. Suicide and self-inflicted injury	E950-E959	374	1.23	108
50. All other external causes	E960-E999	137	0.45	40
Total all causes		30,335	100.00	8,794

(a) No deaths were recorded in the following categories in 1970 : 1. Cholera (000), 2. Typhoid fever (001), 7. Plague (020), 8. Diphtheria (032), 9. Whooping cough (033), 10. Streptococcal sore throat and scarlet fever (034), 12. Acute poliomyelitis (040-043), 13. Smallpox (050), 15. Typhus and other rickettsioses (080-083), 16. Malaria (084).

(b) 002, 003, 005, 007, 021-031, 035, 037-039, 044-046, 051-054, 056, 057, 060-068, 070-079, 085-089, 098-136.

(c) 140-149, 160, 161, 163, 170, 171, 190-192, 200-203, 208, 209.

(d) Too small to register within the limits of the table.

Deaths in 1970 comprised 16,472 males and 13,863 females.

The following table shows deaths in 1970, in certain age groups, detailing the selected main causes of death within those age groups :

VICTORIA—MAIN CAUSES OF DEATH IN AGE GROUPS, 1970

International List Numbers	Age group and cause of death	Deaths from specified cause			
		Number in age group	Percentage of total deaths in age group	Total deaths at all ages	Percentage of total deaths (a)
	Under 1 year	1,060	100.0		
740-759	Congenital anomalies	272	25.7	367	74.1
760-763, 769, 773, 777-779, 776	Other causes of perinatal mortality	227	21.4	228	99.6
	Anoxic and hypoxic conditions, not elsewhere classified	195	18.4	196	99.5
764-768, 772	Birth injury and difficult labour	62	5.8	62	100.0
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	55	5.2	2,027	2.7
770, 771	Conditions of placenta and cord	46	4.3	46	100.0
000-136	Infective and parasitic diseases	28	2.6	216	13.0
774, 775	Haemolytic disease of newborn	27	2.6	28	96.4
800-999	Accidental and violent deaths	24	2.3	2,352	1.0
	Other causes	124	11.7		
	1-4 years	215	100.0		
800-999	Accidental and violent deaths	76	35.3	2,352	3.2
740-759	Congenital anomalies	30	13.9	367	8.2
140-209	Cancer (all forms)	23	10.7	5,176	0.4
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	18	8.3	2,027	0.9
000-136	Infective and parasitic diseases	12	5.6	216	5.5
	Other causes	56	26.2		
	5-14 years	236	100.0		
800-999	Accidental and violent deaths	107	45.3	2,352	4.5
140-209	Cancer (all forms)	43	18.2	5,176	0.8
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	15	6.4	2,027	0.8
740-759	Congenital anomalies	13	5.5	367	3.5
391, 393-398, 402, 404, 410-414, 420-429	Diseases of the heart	6	2.6	10,863	(b)
	Other causes	52	22.0		
	15-19 years	290	100.0		
800-999	Accidental and violent deaths	220	75.8	2,352	9.4
140-209	Cancer (all forms)	14	4.8	5,176	0.3
740-759	Congenital anomalies	9	3.1	367	2.4
391, 393-398, 402, 404, 410-414, 420-429	Diseases of the heart	6	2.6	10,863	(b)
345	Epilepsy	6	2.1	42	14.3
	Other causes	35	12.1		
	20-24 years	332	100.0		
800-999	Accidental and violent deaths	253	76.2	2,352	10.8
140-209	Cancer (all forms)	25	7.6	5,176	0.5
391, 393-398, 402, 404, 410-414, 420-429	Diseases of the heart	7	2.1	10,863	0.1
740-759	Congenital anomalies	7	2.1	367	1.9
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	6	1.8	2,027	0.3
	Other causes	34	10.2		
	25-34 years	470	100.0		
800-999	Accidental and violent deaths	251	53.4	2,352	10.7
140-209	Cancer (all forms)	89	18.9	5,176	1.7
391, 393-398, 402, 404, 410-414, 420-429	Diseases of the heart	33	7.0	10,863	0.3
430-438	Cerebrovascular disease	17	3.6	4,246	0.4
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	15	3.2	2,027	0.7
	Other causes	65	13.9		

(a) Deaths in this age group expressed as a percentage of all deaths from this cause.

(b) Less than 0.1.

VICTORIA—MAIN CAUSES OF DEATH IN AGE GROUPS, 1970—*continued*

International List Numbers	Age group and cause of death	Deaths from specified cause			
		Number in age group	Percentage of total deaths in age group	Total deaths at all ages	Percentage of total deaths (a)
	35-44 years	952	100.0		
800-999	Accidental and violent deaths	261	27.4	2,352	11.1
140-209	Cancer (all forms)	226	23.7	5,176	4.3
391, 393-398, 402, 404, 410-414, 420-429 }	Diseases of the heart	199	20.9	10,863	1.8
430-438	Cerebrovascular disease	67	7.0	4,246	1.6
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	49	5.2	2,027	2.4
	Other causes	150	15.8		
	45-54 years	2,326	100.0		
391, 393-398, 402, 404, 410-414, 420-429 }	Diseases of the heart	760	32.7	10,863	7.0
140-209	Cancer (all forms)	657	28.2	5,176	12.7
800-999	Accidental and violent deaths	320	13.8	2,352	13.6
430-438	Cerebrovascular disease	160	6.9	4,246	3.8
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	108	4.6	2,027	5.3
	Other causes	321	13.8		
	55-64 years	4,637	100.0		
391, 393-398, 402, 404, 410-414, 420-429 }	Diseases of the heart	1,877	40.5	10,863	17.3
140-209	Cancer (all forms)	1,235	26.6	5,176	23.9
430-438	Cerebrovascular disease	461	9.9	4,246	10.9
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	245	5.3	2,027	12.1
800-999	Accidental and violent deaths	232	5.0	2,352	9.9
	Other causes	587	12.7		
	65-74 years	7,471	100.0		
391, 393-398, 402, 404, 410-414, 420-429 }	Diseases of the heart	3,125	41.8	10,863	28.7
140-209	Cancer (all forms)	1,463	19.6	5,176	28.3
430-438	Cerebrovascular disease	1,055	14.1	4,246	24.8
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	564	7.6	2,027	27.8
440-448	Diseases of arteries, arterioles and capillaries	219	2.9	1,261	17.4
	Other causes	1,045	14.0		
	75 years and over	12,346	100.0		
391, 393-398, 402, 404, 410-414, 420-429 }	Diseases of the heart	4,845	39.2	10,863	44.6
430-438	Cerebrovascular disease	2,470	20.0	4,246	58.2
140-209	Cancer (all forms)	1,396	11.3	5,176	27.0
470-493	Influenza, pneumonia, bronchitis, emphysema and asthma	950	7.7	2,027	46.9
440-448	Diseases of arteries, arterioles and capillaries	936	7.6	1,261	74.2
	Other causes	1,749	14.2		

(a) Deaths in this age group expressed as a percentage of all deaths from this cause.

Tuberculosis

The number of deaths ascribed to tuberculosis during 1970 was 48, the rate per million of mean population being 14.

Deaths from tuberculosis of the respiratory system in 1970 numbered 31 and equalled a rate of 9 per million of the mean population. Rates for earlier periods were 130 for 1950-54, 294 in 1945-49, 660 in 1918-22, 855 in 1908-12, and 1,365 in 1890-92. In 1970 tuberculosis of the respiratory system was responsible for 65 per cent of the total deaths from tuberculosis. Of the 21 males and 10 females dying from tuberculosis of the respiratory system in 1970, only one male was under the age of 45 years.

The introduction of compulsory chest X-rays for the detection and treatment of tuberculosis is discussed on pages 486-8.

Malignant neoplasms

Since the introduction of the Eighth Revision of the International Classification of Diseases in 1968, deaths classified as malignant neoplasms include deaths from polycythaemia vera and myelofibrosis. These were not previously included with neoplasms. Deaths from malignant neoplasms in 1970 numbered 5,176 and represented a rate of 1,501 per million of mean population.

Deaths from malignant neoplasms are prominent at most age periods, but the rates in the table below show characteristic increases with age, reaching a maximum mortality rate in the oldest age group.

Ninety-four per cent of the deaths from malignant neoplasms in the year 1970 were at ages 45 years and over.

Satisfactory comparisons of death rates relating to malignant neoplasms are only obtained by relating the deaths to the number of persons in the community of the same sex, in age groups. This has been done for periods centred around the past six censuses, when the numbers of persons in age groups were accurately known, and the results are given in the following table :

VICTORIA—DEATH RATES FROM MALIGNANT NEOPLASMS
IN AGE GROUPS

Age group (years)	Annual deaths from malignant neoplasms per 10,000 of each sex in each age group					
	1920-22	1932-34	1946-48	1953-55	1960-62	1965-67
MALES						
Under 5	0.46	0.27	0.60	1.11	1.06	0.79
5-9	0.13	0.20	0.34	0.98	0.85	0.95
10-14	0.14	0.24	0.24	0.69	0.59	0.57
15-19	0.30	0.37	0.61	0.93	0.95	0.86
20-24	0.64	0.73	0.69	1.27	0.86	1.25
25-34	0.76	0.93	1.20	1.32	1.34	1.62
35-44	3.31	3.04	3.00	4.01	3.93	4.50
45-54	13.94	10.13	11.65	13.25	14.54	14.64
55-64	40.46	37.25	32.73	36.99	41.16	42.09
65-74	78.21	85.19	80.46	82.41	90.40	98.12
75 and over	110.12	133.78	148.20	163.06	161.58	170.73
All ages	9.52	11.63	13.51	13.76	14.15	14.90

VICTORIA—DEATH RATES FROM MALIGNANT NEOPLASMS IN AGE GROUPS—*continued*

Age group (years)	Annual deaths from malignant neoplasms per 10,000 of each sex in each age group					
	1920-22	1932-34	1946-48	1953-55	1960-62	1965-67
FEMALES						
Under 5	0.39	0.38	0.48	1.37	1.04	0.68
5-9	0.17	0.17	0.18	0.60	0.92	0.66
10-14	0.05	0.08	0.40	0.71	0.64	0.46
15-19	0.15	0.17	0.04	0.49	0.66	0.71
20-24	0.30	0.39	0.60	0.56	0.99	0.82
25-34	1.28	1.57	1.75	1.81	1.88	1.50
35-44	6.61	6.00	6.23	6.14	5.76	5.38
45-54	19.14	17.31	16.47	16.46	15.02	16.40
55-64	34.48	35.82	33.40	30.93	30.20	30.30
65-74	63.05	61.17	61.44	59.38	50.34	57.01
75 and over	92.86	106.19	111.49	117.02	103.68	96.93
All ages	9.63	12.00	14.50	14.16	13.12	13.00

The following table shows deaths from malignant neoplasms recorded in 1970 in age groups according to the site of the disease :

VICTORIA—DEATHS FROM MALIGNANT NEOPLASMS BY SEX IN VARIOUS AGE GROUPS, 1970

Site of disease (a)	Sex	Age group (years)				
		Under 25	25-44	45-64	65 and over	Total
Buccal cavity and pharynx (140-149)	M	..	1	42	38	81
	F	..	..	8	23	31
Oesophagus (150)	M	..	2	46	43	91
	F	..	1	13	25	39
Stomach (151)	M	..	11	109	154	274
	F	..	4	40	143	187
Intestine, except rectum (152, 153)	M	..	11	77	164	252
	F	..	18	116	236	370
Rectum and rectosigmoid junction (154)	M	1	2	53	60	116
	F	..	7	26	74	107
Trachea, bronchus and lung (162)	M	..	18	322	411	751
	F	..	7	61	64	132
Breast (174)	M	..	..	1	3	4
	F	..	44	187	210	441
Cervix uteri (180)	M	..	16	44	49	109
Other and unspecified parts of uterus (181, 182)	F	1	2	22	48	73
Ovary, fallopian tube, and broad ligament (183)	F	1	12	78	46	137
Prostate (185)	M	..	..	38	224	262
Bladder (188)	M	..	1	25	72	98
	F	..	..	9	28	37
Other and unspecified urinary organs (189)	M	3	3	27	21	54
	F	..	2	11	31	44
Brain and other parts of nervous system (191, 192)	M	11	20	43	13	87
	F	15	10	29	10	64
Leukaemia (204-207)	M	21	10	24	40	95
	F	14	14	24	42	94
Other neoplasms of lymphatic and haematopoietic system (200-203, 208, 209)	M	9	24	63	71	167
	F	7	12	45	57	121
All other and unspecified sites	M	16	40	179	219	454
	F	11	23	130	240	404
Total	M	61	143	1,049	1,533	2,786
	F	49	172	843	1,326	2,390

(a) Figures in parentheses are in respect of the Eighth Revision of the International List of Causes of Death.

Diabetes mellitus

During 1970 diabetes was responsible for 279 male and 351 female deaths, representing a rate of 183 per million of the mean population.

The rates for previous periods were 269 in 1969, 209 in 1968, 173 in 1967, 181 in 1966, and 166 in 1965.

Cerebrovascular disease

In 1970, 1,670 male and 2,576 female deaths were ascribed to cerebrovascular diseases, the total corresponding to a rate of 1,231 per million of the mean population. The table on pages 152 and 153 shows that cerebrovascular diseases appear as one of the leading causes of death at ages from 25 years and over; they have become an increasing proportion of deaths at higher ages accounting for 20 per cent of deaths at ages 75 years and over. Deaths from this cause according to sex and age are given below:

VICTORIA—DEATHS FROM CEREBROVASCULAR DISEASES BY SEX IN VARIOUS AGE GROUPS, 1970

Cause of death (a)	Sex	Age group (years)					Total deaths
		Under 45	45-54	55-64	65-74	75 and over	
Subarachnoid haemorrhage (430)	M	21	17	25	9	7	79
	F	30	31	46	23	12	142
Cerebral haemorrhage (431)	M	19	39	78	121	135	392
	F	15	33	70	129	303	550
Cerebral infarction (432-434)	M	3	10	54	120	246	433
	F	..	5	34	143	527	709
Acute but ill-defined cerebrovascular disease (436)	M	5	12	64	197	309	587
	F	4	12	80	221	594	911
Other and ill-defined cerebrovascular diseases (435, 437, 438)	M	2	1	4	42	130	179
	F	1	..	6	50	207	264
Total	M	50	79	225	489	827	1,670
	F	50	81	236	566	1,643	2,576

a) Figures in parentheses are in respect of the Eighth Revision of the International List of Causes of Death.

Diseases of the heart

During 1970 there were 10,863 deaths ascribed to diseases of the heart including 2 due to rheumatic fever with heart involvement, 269 due to chronic rheumatic heart disease, 347 to hypertensive heart disease, 6,342 to acute myocardial infarction, 2,637 to other ischaemic heart disease, and 1,266 to other forms of heart disease. The total of these causes in 1970 represented a rate of 3,149 per million of the mean population. Only a small proportion of deaths from heart diseases occurs at ages under 45 years. However, as the table on pages 152 and 153 shows, increases in the number of deaths from heart diseases are already apparent at ages between 25 and 45 years, and become the major cause of death at ages 45 and over. Deaths in 1970 from this cause by sex and age group are given in the following table:

**VICTORIA—DEATHS FROM HEART DISEASES BY SEX IN VARIOUS
AGE GROUPS, 1970**

Cause of death (a)	Sex	Age group (years)					Total deaths
		Under 45	45-54	55-64	65-74	75 and over	
Rheumatic fever with heart involvement (391)	M	..	..	..	1	..	1
	F	1	..	..	..	..	1
Chronic rheumatic heart disease (393-398)	M	13	19	24	34	21	111
	F	12	21	42	36	47	158
Hypertensive heart disease (402, 404)	M	2	9	18	38	73	140
	F	..	3	16	58	130	207
Acute myocardial infarction (410)	M	92	394	963	1,288	1,161	3,898
	F	19	81	273	770	1,301	2,444
Other ischaemic heart disease (411-414)	M	54	154	339	417	538	1,502
	F	14	35	102	249	735	1,135
Other forms of heart disease (420-429)	M	25	31	65	126	302	549
	F	24	13	35	108	537	717
Total	M	186	607	1,409	1,904	2,095	6,201
	F	70	153	468	1,221	2,750	4,662

a) Figures in parentheses are in respect of the Eighth Revision of the International List of Causes of Death.

Diseases of the respiratory system

In 1970 deaths from diseases of the respiratory system numbered 2,277 which represented a rate of 660 per million of the mean population. Of these deaths in 1970, 114 were due to influenza, 125 to other acute respiratory infections, 788 to pneumonia, 1,125 to bronchitis, emphysema and asthma, and 125 to other diseases.

The 114 deaths from influenza in 1970 represented a rate of 33 per million of the mean population. Eighty-seven per cent of the deaths were of persons aged 50 years or over.

Diseases of the digestive system

In 1970 there were 400 male and 330 female deaths from diseases of the digestive system, representing a rate of 212 per million of the mean population. Deaths from causes in this group in 1970 were: 177 from ulcers of the stomach and duodenum, 7 from gastritis and duodenitis, 14 from appendicitis, 88 from intestinal obstruction and hernia, 9 from chronic enteritis and ulcerative colitis, 196 from cirrhosis of the liver, 63 from cholelithiasis and cholecystitis, and 176 from other diseases.

Diseases of the genito-urinary system

In 1970 there were 476 deaths attributed to diseases of the genito-urinary system. This number represented a rate of 138 per million of the mean population. In 1970 nephritis and nephrosis were responsible for 168 deaths, infections of the kidney for 126, calculi of the urinary system for 13, hyperplasia of prostate for 85, and other diseases of the genito-urinary system for 84.

Deaths from external causes

Deaths in 1970 from external causes, including suicide and homicide, represented approximately 8 per cent of total deaths. Accidents and violence feature as the main cause of death after the first year of life until middle age, but in age groups from 40 years onward they progressively assume a less prominent position. In 1970 male deaths from external causes were 67 per cent of the total deaths in this category.

Accidental deaths involving motor vehicles

The number of motor vehicles (including motor cycles) registered in Victoria and the deaths in which they were involved were as follows for the years 1966 to 1970 :

VICTORIA—DEATHS INVOLVING MOTOR VEHICLES

Year	Number of motor vehicles on register at 30 June	Deaths involving motor vehicles		
		Number (a)	Per 10,000 motor vehicles	Per 1,000,000 of mean population
1966	1,092,980	918	8.4	285
1967	1,136,548	993	8.7	303
1968	1,193,336	904	7.6	272
1969	1,254,638	1,087	8.7	321
1970	1,321,516	1,097	8.3	318

(a) Deaths of pedestrians included in this column numbered 242, 260, 238, 286, and 249, respectively.

NOTE. See also road traffic accident statistics on pages 737-9.

Transport accidents

In 1970 deaths from all transport accidents numbered 1,158, as against 1,137 in 1969, 948 in 1968, 1,052 in 1967, and 968 in 1966. During 1970 deaths connected with transport represented 63 per cent of the total deaths from accidents.

Injury undetermined whether accidentally or purposely inflicted

In many cases it is not possible to determine whether death from an external cause was accidentally or purposely inflicted, i.e., whether the death was due to accident, suicide, or homicide. Before 1968 such deaths had been included with known accidental deaths. With the introduction of the Eighth Revision of the International List of Causes of Death a separate category was created to include cases where the mode of infliction was undetermined. Deaths allocated to this category in 1970 totalled 89.

Suicide and self-inflicted injury

In 1970 deaths from suicide or wilfully self-inflicted injury numbered 252 males and 122 females. These deaths represented a rate of 108 per million of the mean population. Of the 252 male deaths in 1970, 71 were connected with firearms and explosives, and 81 with poisoning by solid or liquid substances. The latter accounted for 60 of the 122 female deaths.

Homicide

The number of deaths ascribed to homicide and registered in 1970 was 48 (25 males and 23 females). Deaths from criminal abortion are excluded from this category and are included with deaths from maternal causes.

Infant mortality

The mortality of children under one year, in proportion to live births,

has revealed a remarkable decline. The deaths per 1,000 children born fell from 133 in 1885-1889 to 16 in 1966-1970 (a reduction of 88 per cent). In other words, of every 100 infants who died in the earlier period, only 12 would have died in the latter.

A significant part of the improvement in the rate in recent years has been effected in relation to deaths of infants during the first four weeks of life, commentary on which appears on the following pages.

The following tables show the number of infant deaths and the infant death rate per 1,000 live births in each of the Australian States and Territories for the years 1966 to 1970 :

AUSTRALIA—INFANT DEATHS

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1966	1,490	1,116	581	356	329	108	19	46	4,045
1967	1,452	1,101	678	346	314	130	122	44	4,187
1968	1,525	1,010	716	345	397	143	101	45	4,282
1969	1,625	1,066	691	347	453	139	103	58	4,482
1970	1,743	1,060	672	367	459	117	127	61	4,606

AUSTRALIA—INFANT MORTALITY RATES (a)

Year	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Australia
1966	19.2	17.4	17.7	17.5	19.3	14.6	(b)	19.8	18.17
1967	18.4	16.8	19.5	17.0	17.4	17.2	63.5	18.3	18.26
1968	18.7	14.4	20.3	16.3	20.3	17.2	48.5	17.0	17.77
1969	18.9	15.0	18.9	15.8	21.8	16.5	45.3	18.8	17.92
1970	19.7	14.5	17.9	16.2	21.2	14.3	48.4	17.6	17.89

(a) Number of deaths under one year of age per 1,000 live births.

(b) Less than 20 deaths ; rates not calculated.

The infant death rates for the Melbourne Statistical Division, for the remainder of the State, and for the whole State, for the years 1966 to 1970, are shown in the following table. Figures relate to the Melbourne Statistical Division as defined for the 1966 Census (see page 117).

VICTORIA—INFANT MORTALITY

Year	Melbourne Statistical Division		Remainder of State		Victoria	
	Number of deaths under one year	Rate per 1,000 live births	Number of deaths under one year	Rate per 1,000 live births	Number of deaths under one year	Rate per 1,000 live births
1966	784	17.8	332	16.7	1,116	17.4
1967	746	16.4	355	17.8	1,101	16.8
1968	685	13.9	325	15.4	1,010	14.4
1969	730	14.5	336	16.2	1,066	15.0
1970	721	13.7	339	16.7	1,060	14.5

NOTE. Births and deaths registered in Victoria are allotted to the place of usual residence of the parties. In the cases of births and infant deaths, the mother's residence is considered to be that of the child.

Infant death rates have shown a decrease in each quinquennial period from 1885 onwards. In 1954 the rate fell below 20 per 1,000 live births for the first time. In 1968 the rate was 14.4, the lowest ever recorded in Victoria.

The decrease in the infant death rate since the earlier periods has been shared proportionally by each age group except that of "under one week". The rate for infants "one week and under one month" declined from 11.1 in 1910-1914 to 1.2 in 1966-1970, a decrease of 89 per cent, and that for infants "one month and under one year" from 41.2 to 4.0, a decrease of 90 per cent. Between the ages of one month and one year, Victoria lost 64 out of every 1,000 children born in 1900-1904, 33 in 1915-1919, and 4 in 1966-1970. The rate per 1,000 live births for infants "under one week" has declined from 21.5 in the quinquennium 1910-1914 to 10.4 in 1966-1970. In 1970 the mortality of infants "under one week" comprised 66 per cent of the total infant mortality.

The following tables show mortality rates at certain ages under one year for the years 1966 to 1970 :

VICTORIA—INFANT MORTALITY AT CERTAIN AGES

Year	Deaths under one year per 1,000 live births						Males	Females
	Under one week	One week and under one month	One month and under three months	Three months and under six months	Six months and under twelve months	Total under one year		
1966	11.7	1.4	1.4	1.5	1.4	17.4	18.8	16.0
1967	11.4	1.3	1.5	1.5	1.1	16.8	18.2	15.3
1968	9.6	1.0	1.3	1.4	1.1	14.4	16.1	12.6
1969	9.7	1.2	1.2	1.5	1.4	15.0	16.6	13.4
1970	9.5	1.1	1.6	1.2	1.0	14.5	16.2	12.8

VICTORIA—INFANT MORTALITY AT CERTAIN AGES, BY SEX, 1970

Sex	Under one week	One week and under one month	One month and under three months	Three months and under six months	Six months and under twelve months	Total under one year
Males—						
Number	405	42	58	61	39	605
Rate (a)	5.6	0.6	0.8	0.8	0.5	16.2
Percentage of total	67.0	6.9	9.6	10.1	6.4	100.0
Females—						
Number	292	39	58	30	36	455
Rate (a)	4.0	0.5	0.8	0.4	0.5	12.8
Percentage of total	64.2	8.6	12.7	6.6	7.9	100.0

(a) Number of deaths in each age group per 1,000 live births.

The rate for male infants is consistently higher than that for females, and in the period 1966-1970 exceeded the female rate by 23 per cent.

In 1970, 274 or 26 per cent of infant deaths were attributed to maternal conditions or complications of pregnancy or labour. Other perinatal causes, including anoxic and hypoxic conditions not elsewhere classified, accounted for 195 deaths. Congenital anomalies were responsible for 272 or 26 per cent and pneumonia for 51 or 5 per cent of infant deaths.

The following table shows the number of deaths of infants at certain ages, by cause, in 1970:

VICTORIA—INFANT MORTALITY AT CERTAIN AGES, BY CAUSE, 1970

Cause of death (a)	Deaths under one year					Total under one year
	Under one week	One week and under one month	One month and under three months	Three months and under six months	Six months and under twelve months	
Chronic circulatory and genito-urinary disease in mother (760)	3	1	..	..	..	4
Other maternal conditions unrelated to pregnancy (761)	18	1	..	1	..	20
Toxaemias of pregnancy (762)	31	1	..	..	..	32
Maternal ante- and intrapartum infection (763)	11	..	1	..	..	12
Difficult labour (764-768)	28	3	..	..	..	31
Other complications of pregnancy and childbirth (769)	92	3	..	..	..	95
Conditions of placenta (770)	43	..	..	..	..	43
Conditions of umbilical cord (771)	3	..	..	..	..	3
Birth injury and termination of pregnancy without mention of cause (772, 773)	32	2	..	..	..	34
Haemolytic disease of newborn (774, 775)	24	2	1	..	..	27
Anoxic and hypoxic conditions, not elsewhere classified (776)	189	5	..	1	..	195
Immaturity, unqualified (777)	41	3	..	..	..	44
Other conditions of newborn (778, 779)	15	..	1	1	..	17
Congenital anomalies (740-759)	144	45	38	26	19	272
Infections (000-136)	2	2	10	6	8	28
Pneumonia (480-486)	8	3	19	14	7	51
Other diseases (140-474, 490-738, 780-796)	11	10	43	36	28	128
Inhalation or ingestion of food or other object causing obstruction or suffocation, and accidental mechanical suffocation (E911-E913)	..	..	1	3	4	8
Other external causes (E800-E910, E914-E999)	2	..	2	3	9	16
Total all causes	697	81	116	91	75	1,060

(a) Figures in parentheses refer to the Eighth Revision of the International List of Causes of Death.

A comparison of infant mortality rates from the principal causes for certain periods from 1891 to 1949 was shown on page 506 of the *Victorian Year Book* 1954-1958.

Stillbirths

Registration of stillbirths came into operation in Victoria in 1953. For registration purposes a stillborn child means "any child born of its mother after the 28th week of pregnancy, which did not at any time after being born, breathe or show any other sign of life, and, where the duration of pregnancy is not reliably ascertainable, includes any foetus weighing not less than 2 lb 12 oz". Consistent with action taken in other States, action has now been taken in Victoria with a view to using the 20th week of pregnancy in defining a stillbirth.

VICTORIA—STILLBIRTHS AND INFANT MORTALITY

Year	Stillbirths		Deaths under one month		Deaths under one month plus stillbirths		Deaths under one year plus stillbirths	
	Number	Rate per 1,000 births (live and still)	Number	Rate per 1,000 births (live and still)	Number	Rate per 1,000 births (live and still)	Number	Rate per 1,000 births (live and still)
1966	762	11.77	844	13.03	1,606	24.80	1,878	28.99
1967	797	12.03	828	12.49	1,625	24.52	1,898	28.64
1968	768	10.82	746	10.51	1,514	21.33	1,744	24.58
1969	761	10.60	777	10.82	1,538	21.42	1,827	25.45
1970	782	10.60	778	10.54	1,560	21.14	1,842	24.96

Cremation

There are four crematoria in Victoria, three in the metropolitan area and one in Ballarat.

The number of cremations in relation to total deaths from 1966 to 1970 is shown in the following table :

VICTORIA—CREMATIONS AND DEATHS

Year	Total cremations	Total deaths	Percentage of cremations to deaths
1966	10,362	28,673	36.14
1967	10,173	28,373	35.85
1968	10,939	29,967	36.50
1969	10,617	28,976	36.64
1970	11,265	30,335	37.14

4

INDUSTRIAL CONDITIONS, EMPLOYMENT, AND PRICES

INDUSTRIAL CONDITIONS

Industrial arbitration

In Victoria there are two systems of industrial arbitration for the adjustment of relations between employers and employees: the State system which operates under the law of the State within its territorial limits, and the Commonwealth system which applies to industrial disputes extending beyond the limits of the State and includes the stevedoring industry and maritime industries.

In addition, under Commonwealth law there is a special tribunal to determine the industrial conditions of employment in the Public Service of the Commonwealth; there is also a flight crew officers industrial tribunal.

Commonwealth-State relations

The relation between the State and Commonwealth systems of industrial arbitration depends on the distribution of legislative powers between the Commonwealth and the States.

Under the Commonwealth of Australia Constitution Act, the Commonwealth jurisdiction is limited to "conciliation and arbitration for the prevention and settlement of industrial disputes extending beyond the limits of any one State". The High Court of Australia has also ruled that the Commonwealth Parliament cannot empower an industrial tribunal to declare an award a "common rule", or industry wide award, to be observed by all persons engaged in the industry concerned.

The Act also provides that if a State law is inconsistent with a valid Commonwealth law, the latter prevails, with the inconsistent portions of the State law becoming inoperative. An award by the Commonwealth Conciliation and Arbitration Commission has been held to be a Commonwealth law, and in certain circumstances awards of Commonwealth industrial tribunals override those made by State tribunals.

Despite the limitations of its jurisdiction the Commonwealth system has gradually become predominant in the sphere of industrial arbitration throughout Australia. Its influence extended, in the first place, with the gradual adoption of the principle of federation in trade unionism and in political organisation, a tendency which gathered force during the First World War period. As industry expanded over interstate borders, uniformity of industrial

conditions was sought by employers, while employees were attracted to the Commonwealth jurisdiction in the expectation of better terms as to wages, etc., than those awarded under State legislation. In many cases, also, the organisations concerned in a Commonwealth award have taken action to have its terms embodied in State awards so that they become binding as a common rule in the industry. Again, for the sake of uniformity, legislatures of some States, notably Victoria and New South Wales, adopted the Commonwealth wage standards as the basis of State awards and agreements.

Commonwealth Industrial Court and Commonwealth Conciliation and Arbitration Commission

The *Conciliation and Arbitration Act* 1904 established the Commonwealth Court of Conciliation and Arbitration. The Act was extensively amended in 1956 and this amendment altered the structure of the arbitration machinery by separating the judicial functions from the conciliation and arbitration functions. The Commonwealth Industrial Court was established to deal with judicial matters, and the Commonwealth Conciliation and Arbitration Commission to handle the functions of conciliation and arbitration. Further amendments have since been incorporated.

The *Conciliation and Arbitration Act* 1904–1968 defines an industrial dispute as “(a) A dispute (including a threatened, impending or probable dispute) as to industrial matters which extends beyond the limits of any one State ; and (b) a situation which is likely to give rise to a dispute as to industrial matters which so extends ; and includes—(c) such a dispute in relation to employment in an industry carried on by, or under the control of, a State or an authority of a State ; (d) a dispute in relation to employment in an industry carried on by, or under the control of, the Commonwealth or an authority of the Commonwealth, whether or not the dispute extends beyond the limits of any one State ; and (e) a claim which an organisation is entitled to submit to the Commission under section eleven A of the *Public Service Arbitration Act* 1920–1964 or an application or matter which the Public Service Arbitrator has refrained from hearing, or from further hearing, or from determining under section fourteen A of that Act, whether or not there exists in relation to the claim, application or matter, a dispute as to industrial matters which extends beyond the limits of any one State ”.

The Commonwealth Industrial Court is at present composed of a Chief Judge and six other Judges. The Commonwealth Conciliation and Arbitration Commission comprises a President, six Deputy Presidents, a Senior Commissioner, twelve Commissioners, and two Conciliators. Judges of the Commonwealth Court of Conciliation and Arbitration were made either members of the Commonwealth Industrial Court or presidential members of the Commonwealth Conciliation and Arbitration Commission. Conciliation Commissioners became non-presidential members of the Commission.

A fuller treatment of the Commonwealth and State arbitration systems is given on pages 462–6 of the *Victorian Year Book* 1964.

Wages Boards

In Victoria the regulation and arbitration of industrial matters is carried out by Wages Boards, which are statutory bodies under the State Department of Labour and Industry for purposes of administration.

The Wages Board method of fixing wages and settling conditions of employment was instituted in Victoria by an Act of Parliament in 1896, and represented the first example in Australia of legal regulation of wage rates.

Wages Boards are established for specific industries or occupations, and a General Board deals with certain trades not covered by determinations of other Wages Boards. A Board may be appointed for any trade or branch of it, and each Board consists of an even number of members and a chairman. Originally each Board was composed of equal numbers of employers and employees, with a qualification that each representative should be actively engaged in the trade concerned. This qualification was later extended to include, as representatives of employers, officers of appropriate organisations or associations, or persons nominated to represent corporations or public bodies, and, as representatives of employees, officers of appropriate organisations or associations.

The *Labour and Industry Act* 1958 (in general a consolidation of the previous Acts) requires that every Wages Board shall, in determining wage rates or piece work prices, take into consideration relevant awards of, or agreements certified by, the Commonwealth Conciliation and Arbitration Commission. The Act gives Wages Boards similar powers relating to wages and conditions of labour to those incorporated in the Commonwealth Conciliation and Arbitration Act. These powers enable Wages Boards to make determinations concerning any industrial matter whatsoever in relation to any trade or branch of trade for which such a board has been appointed and, in particular, to determine all matters relating to :

1. pay, wages, and reward ;
2. work days and hours of work ;
3. privileges, rights, and duties of employers and employees ;
4. the mode, terms, and conditions of employment or non-employment ;
5. the relations of employers and employees ;
6. the employment or non-employment of persons of either sex or any particular age ;
7. the demarcation of functions of any employees or class of employees ; and
8. questions of what is fair and right in relation to any industrial matter, having regard to the interests of the persons immediately concerned and of society as a whole.

Wages Boards are not empowered to determine any matter relating to the preferential employment or dismissal of persons as being or as not being members of any organisation, association, or body.

Industrial Appeals Court

An Industrial Appeals Court was first set up in 1903 by the Victorian Parliament. Appeals against the determination of a Wages Board may be made to the Industrial Appeals Court. Such appeals must be made by the employer's or employee's organisation or by a majority of the employer or employee representatives on the Board concerned or by any person with the leave of the Industrial Appeals Court. In addition, any person may apply to the Supreme Court to have a determination quashed on grounds of illegality.

Intervention by Minister

The *Labour and Industry (Amendment) Act 1960* empowers the Minister of Labour and Industry to intervene in the public interest in any appeal to the Industrial Appeals Court against a determination of a Wages Board. Further, as consumers are not represented on Wages Boards, the Act also authorises the Minister to refer, under appropriate circumstances, the determination of a Wages Board to the Court.

The *Labour and Industry (Amendment) Act 1965* further provides that where a matter requires to be determined by ten or more Wages Boards the Minister may refer the matter to the Industrial Appeals Court. This provision was added to by the *Labour and Industry (Amendment) Act 1966* which empowers the Minister to refer any residue of less than ten applications to the Court. The aim of the amendments is to remove the necessity to convene individual meetings of the Boards in such cases.

Action to prevent or minimise industrial disputes

Section 41 (2) of the Labour and Industry Act provides that "Any interested organisation of employers or employees shall inform the chairman of the appropriate Wages Board of any threatened probable impending or actual strike or industrial dispute in any trade subject to such Wages Board, and thereupon the Chairman shall immediately call a meeting of the Board to consider the matter." During 1970 there were 35 meetings of Wages Boards called under section 41 (2) to deal with 29 disputes. Of these, 22 were settled by the Boards at the first meeting, 5 at subsequent meetings, and 2 were not resolved by the end of the year.

Incidence of industrial awards, determinations, and agreements

In April 1954, May 1963, and May 1968, surveys were conducted to determine the approximate proportions of employees covered by awards, determinations, and registered industrial agreements under the jurisdiction of Commonwealth and State industrial authorities. The proportions of employees not so covered (including those working under unregistered industrial agreements) were also obtained.

Returns were collected from: (a) a stratified random sample of those private employers and local government authorities subject to pay-roll tax, and (b) practically all Commonwealth and State Government and semi-government authorities, and public hospitals. Because of coverage difficulties, employees on rural holdings and in private households were excluded altogether from the surveys.

VICTORIA—INCIDENCE OF INDUSTRIAL AWARDS, ETC.

Date	Males				Females			
	Employees represented in estimates	Employees affected by awards, etc.		Other employees	Employees represented in estimates	Employees affected by awards, etc.		Other employees
		Commonwealth	State			Commonwealth	State	
	'000	per cent	per cent	per cent	'000	per cent	per cent	per cent
April 1954	509	59.4	27.4	13.2	194	47.7	45.2	7.1
May 1963	588	57.3	27.9	14.8	244	44.3	47.0	8.7
May 1968	667	57.7	24.6	17.7	312	39.9	50.8	9.3

**VICTORIA—PERCENTAGE OF PRIVATE AND GOVERNMENT
EMPLOYEES AFFECTED BY AWARDS, ETC., MAY 1968**
(per cent)

Particulars	Males			Females		
	Employees affected by awards, etc.		Other employees	Employees affected by awards, etc.		Other employees
	Common-wealth	State		Common-wealth	State	
Private employees	51.9	25.0	23.1	40.4	50.3	9.3
Government employees	70.6	23.8	5.6	37.5	52.9	9.6
Total private and government	57.7	24.6	17.7	39.9	50.8	9.3

**VICTORIA—PERCENTAGE OF EMPLOYEES AFFECTED BY
AWARDS, ETC., BY INDUSTRY GROUPS, MAY 1968**
(per cent)

Industry group	Males			Females		
	Employees affected by awards, etc.		Other employees	Employees affected by awards, etc.		Other employees
	Common-wealth	State		Common-wealth	State	
Manufacturing groups	65.9	17.5	16.6	65.6	26.1	8.4
Non-manufacturing groups	51.4	30.1	18.5	20.9	69.1	10.1
All industry groups	57.7	24.6	17.7	39.9	50.8	9.3

Rates of wage

In 1913 the Commonwealth Bureau of Census and Statistics first collected information on current wage rates for different callings and for occupations in various industries.

Early in 1960 the Bureau introduced new indexes of minimum weekly wage rates for adult males and females (base 1954 = 100) to replace the old series of nominal weekly wage rate index numbers for adult males and females with 1911 and 1914, respectively, as base years. In general, this revision was necessary to match changes in the industrial structure. The particulars are obtained primarily from awards, determinations, and agreements under Commonwealth and State Industrial Acts and are, therefore, the minimum rates prescribed. They refer generally to the capital city in each State, but in industries which are not carried on in the capital cities, e.g., mining, agriculture, etc., the rates in the more important centres are taken.

The new index numbers are based on the occupation structure of 1954 and cover fifteen industrial groups for adult males and eight industrial groups for adult females. Weights for each occupation and each industry were

derived from two sample surveys made in that year. The first was the Survey of Awards in April 1954, which showed the number of employees covered by individual awards, determinations, and agreements. This provided employee weights for each industry as well as a basis for the Survey of Award Occupations made in November 1954. This second survey showed the number of employees in each occupation within selected awards, etc., thereby providing occupation weights.

The minimum wage rates used are for representative occupations within each industry. They have been derived from representative awards, determinations, and agreements in force at the end of each quarter, as from March 1939, for adult males and March 1951, for adult females. Using the industry and occupation weights determined by the surveys, the various rates were combined to give weighted averages for each industry group for Australia, and weighted averages for industry groups for each State. These weighted averages are shown in the following table in dollars and as index numbers. The indexes are designed to measure movements in prescribed minimum rates of "wages" as distinct from "salaries". Consequently, awards, etc., relating solely or mainly to salary earners are excluded.

MINIMUM WEEKLY WAGE RATES (a)

At end of—	Rates of wage (b) (\$)		Index numbers (Australia 1954=100) (c)	
	Victoria	Australia	Victoria	Australia
ADULT MALES				
December 1962	36.37	36.66	128.8	129.8
December 1963	37.20	37.55	131.7	133.0
December 1964	39.47	39.65	139.8	140.4
December 1965	40.34	40.76	142.8	144.3
December 1966	42.78	43.05	151.5	r 152.4
December 1967	44.59	45.00	157.9	159.3
December 1968	48.86	48.98	173.0	173.4
December 1969	r 51.74	r 51.86	r 183.2	r 183.6
December 1970	53.47	(d) 54.05	189.3	(d) 191.4
ADULT FEMALES				
December 1962	25.67	26.15	128.9	131.4
December 1963	26.08	26.69	131.0	134.1
December 1964	27.67	28.34	139.0	142.3
December 1965	28.46	29.10	143.0	146.2
December 1966	30.06	30.70	151.0	154.2
December 1967	32.04	32.57	160.9	163.6
December 1968	34.52	34.85	173.4	175.0
December 1969	r 37.08	r 37.70	186.2	r 189.4
December 1970	38.64	39.66	194.1	199.2

(a) Weighted average minimum weekly rates, all groups, shown as rates of wage and in index numbers; excludes rural industry.

(b) The amounts shown should not be regarded as actual current averages, but as indexes expressed in money terms, indicative of trends.

(c) Base: weighted average weekly wage rate for Australia, 1954=100.

(d) Includes the 10 per cent additions to minimum wage rates for adult males in some Western Australian State awards payable from December 1970.

r: Revised.

**MINIMUM WEEKLY WAGE RATES (a): INDUSTRY GROUPS,
30 JUNE 1971**

Industry group	Rates of wage (b) (\$)		Index numbers (Australia 1954=100) (c)	
	Victoria	Australia	Victoria	Australia
ADULT MALES				
Mining and quarrying (d)	57.46	65.16	203.5	230.7
Manufacturing—				
Engineering, metals, vehicles, etc.	55.86	55.56	197.8	196.7
Textiles, clothing, and footwear	54.22	54.38	192.0	192.6
Food, drink, and tobacco	58.53	56.93	207.2	201.6
Sawmilling, furniture, etc.	55.37	56.56	196.1	200.3
Paper, printing, etc.	61.66	61.90	218.3	219.2
Other manufacturing	56.40	56.77	199.7	201.0
All manufacturing groups	56.42	56.32	199.8	199.4
Building and construction	63.34	60.28	224.3	213.4
Railway services	50.55	54.52	179.0	193.1
Road and air transport	56.25	57.33	199.2	203.0
Shipping and stevedoring (e)	64.14	63.84	227.1	226.0
Communication	76.18	75.70	269.7	268.0
Wholesale and retail trade	57.45	58.15	203.4	205.9
Public authority (n.e.i.) and community and business services	58.72	58.98	207.9	208.8
Amusement, hotels, personal service, etc.	54.20	54.60	191.9	193.3
 All industry groups	 57.92	 58.22	 205.0	 206.1
ADULT FEMALES				
Manufacturing—				
Engineering, metals, vehicles, etc.	44.55	44.39	223.8	223.0
Textiles, clothing, and footwear	38.54	38.96	193.6	195.7
Food, drink, and tobacco	39.96	40.85	200.7	205.2
Other manufacturing	40.99	40.74	205.9	204.6
All manufacturing groups	40.02	40.56	201.0	203.8
Transport and communication	55.84	56.20	280.5	282.3
Wholesale and retail trade	43.75	44.93	219.8	225.7
Public authority (n.e.i.) and community and business services	46.81	45.78	235.1	230.0
Amusement, hotels, personal service, etc.	43.24	43.25	217.2	217.2
 All industry groups	 42.10	 43.02	 211.5	 216.1

(a) Weighted average minimum weekly rates shown as rates of wage and in index numbers; excludes rural industry.

(b) The amounts shown should not be regarded as actual current averages, but as indexes expressed in money terms, indicative of trends.

(c) Base: weighted average weekly wage rate for Australia, 1954=100.

(d) For mining, the average rates of wage on which index numbers are based are those prevailing at the principal mining centres in each State.

(e) For shipping, average rates of wage on which index numbers are based are for occupations other than masters, officers, and engineers in the merchant marine service, and include value of keep, where supplied.

Standard hours of work

In the fixation of weekly wage rates most industrial tribunals prescribe the number of hours constituting a full week's work for the wage rates specified. In 1914 the 48 hour week was the recognised standard working week for most industries.

In 1927 the Commonwealth Court of Conciliation and Arbitration granted a 44 hour week to the Amalgamated Engineering Union and intimated that this reduction in standard hours of work would be extended to industries

operating under conditions similar to those in the engineering industry. However, the economic depression delayed the extension of the standard 44 hour week until improvement in economic conditions made possible a general extension to employees under Commonwealth awards.

40 hour week

Soon after the end of the Second World War applications were made to the Commonwealth Court of Conciliation and Arbitration for the introduction of a 40 hour week. The judgment, given on 8 September 1947, granted the reduction to 40 hours from the start of the first pay period in January 1948. In Victoria, the Wages Boards incorporated the shorter working week in their determinations. From the beginning of 1948 practically all employees in Australia whose conditions of labour were regulated by industrial authorities had the advantages of a standard working week of 40 hours or, in certain cases, less.

In the 1952-53 Basic Wage and Standard Hours Inquiry, the employers sought an increase in the standard hours of work per week claiming it to be one of the chief causes of inflation. (See Commonwealth Arbitration Report, Vol. 77, page 505.) The Court found that the employers had not proved that the existing economic situation called for a reduction of general standards in the matter of the ordinary working week.

Weekly hours of work

The number of hours constituting a full week's work (excluding overtime) differs in some instances between various trades and occupations and between

VICTORIA—WEEKLY HOURS OF WORK (EXCLUDING OVERTIME): ADULT MALES: INDUSTRY GROUPS (a)

Industry group	Hours of work (b)			Index numbers (c)		
	31 March 1939	31 March 1948	31 December 1970	31 March 1939	31 March 1948	31 December 1970
Mining and quarrying (d)	44.34	40.52	40.00	111.0	101.4	100.1
Manufacturing—						
Engineering, metals, vehicles, etc.	44.05	40.00	40.00	110.2	100.1	100.1
Textiles, clothing and footwear	44.40	40.03	40.00	111.1	100.2	100.1
Food, drink, and tobacco	44.82	40.12	40.00	112.2	100.4	100.1
Sawmilling, furniture, etc.	44.37	40.00	40.00	110.0	100.1	100.1
Paper, printing, etc.	43.68	39.94	39.94	109.3	99.9	100.0
Other manufacturing	44.02	39.97	39.96	110.2	100.0	100.0
All manufacturing groups	44.19	40.05	39.99	110.6	100.2	100.1
Building and construction	44.18	40.00	40.00	110.6	100.7	100.1
Railway services	43.96	39.97	39.96	110.0	100.0	100.0
Road and air transport	46.70	40.10	40.00	116.9	100.4	100.1
Communication	44.00	40.00	40.00	110.1	100.1	100.1
Wholesale and retail trade	45.47	40.11	40.00	113.8	100.4	100.1
Public authority (n.e.i.) and community and business services	42.75	38.93	38.93	107.0	97.4	97.4
Amusement, hotels, personal service, etc.	45.86	40.03	40.00	114.8	100.2	100.1
All industry groups (a)	44.46	40.03	39.97	111.3	100.2	100.0

For footnotes, see end of following table.

**VICTORIA—WEEKLY HOURS OF WORK (EXCLUDING OVERTIME):
ADULT FEMALES: INDUSTRY GROUPS (a)**

Industry group	Hours of work (b)			Index numbers (c)		
	31 March 1951	30 June 1953	31 December 1970	31 March 1951	30 June 1953	31 December 1970
Manufacturing—						
Engineering, metals, vehicles, etc.	39.87	39.87	39.87	100.5	100.5	100.5
Textiles, clothing, and footwear	40.00	40.00	40.00	100.8	100.8	100.8
Food, drink, and tobacco	40.00	40.00	40.00	100.8	100.8	100.8
Other manufacturing	39.94	39.94	39.94	100.7	100.7	100.7
All manufacturing groups	39.97	39.97	39.97	100.8	100.8	100.8
Transport and communication	37.94	37.94	37.94	95.6	95.6	95.6
Wholesale and retail trade	40.00	40.00	40.00	100.8	100.8	100.8
Public authority (n.e.i.) and community and business services	39.25	39.25	39.25	98.9	98.9	98.9
Amusement, hotels, personal service, etc.	39.94	39.94	39.94	100.7	100.7	100.7
All industry groups (a)	39.81	39.81	39.81	100.3	100.3	100.3

NOTE. Weighted average standard hours of work (excluding overtime) for a full working week and index numbers of hours of work.

(a) Excludes rural industry, shipping and stevedoring for males and females, and also mining and quarrying and building and construction for females.

(b) The figures shown should not be regarded as actual current averages, but as indexes expressed in hours, indicative of trends.

(c) Base: weighted average for Australia, 1954=100.

(d) For mining, the average hours of work are those prevailing at the principal mining centres.

the same trades and occupations in the several States. The particulars of weekly hours of work given in the tables on pages 170–1 relate to all industry groups except rural, shipping, and stevedoring. These groups are excluded because for earlier years the hours of work for some of the occupations included were not regulated either by awards or determinations of industrial tribunals or by legislation. As a result, the necessary particulars for the computation of average working hours for these groups are not available.

Average weekly earnings

The figures in this section are derived from particulars of employment and of wages and salaries recorded on pay-roll tax returns, from other direct collections, and from estimates of the unrecorded balance. The figures relate to civilians only.

Particulars of wages and salaries paid are not available for males and females separately from these sources; average weekly earnings have, therefore, been calculated in terms of male units, i.e., in Victoria total male employees plus 53 per cent of female employees. This proportion is derived from the estimated ratio of female to male earnings.

The series previously published in former *Year Books* has been revised and an index is no longer available.

As the number of male units used in calculating Australian average weekly earnings is the sum of the estimates for the States, a separate ratio for Australia as a whole is not used, but the weighted average of the State ratios is approximately 52.5 per cent.

Corresponding figures for each quarter are published in the *Monthly Review of Business Statistics* and the monthly bulletin *Wage Rates and Earnings*. Quarterly figures of average weekly earnings are also published in the *Victorian Monthly Statistical Review*.

AUSTRALIA AND VICTORIA—
AVERAGE WEEKLY EARNINGS
PER EMPLOYED MALE UNIT (a)
(\$)

Period	Victoria	Australia
1961-62	..	47.60
1962-63	..	48.90
1963-64	..	51.50
1964-65	..	55.30
1965-66	..	57.90
1966-67	63.90	61.70
1967-68	67.60	65.30
1968-69	72.10	70.20
1969-70	78.10	76.10
1970-71	86.20	84.70

NOTE. For a number of reasons, average weekly earnings per employed male unit cannot be compared with the weekly wage rates shown on page 176.

(a) Includes, in addition to wages at award rates, earnings of salaried employees, overtime earnings, over-award and bonus payments, payments made in advance or retrospectively during the period specified, etc. See explanatory notes on page 176.

AUSTRALIA AND VICTORIA—
AVERAGE WEEKLY EARNINGS
PER EMPLOYED MALE UNIT (a)
(\$)

Quarter	Victoria	Australia	
		Original	Seasonally adjusted
1968—March	64.40	63.00	65.50
June	69.30	67.10	66.80
September	69.60	67.60	67.70
December	74.00	72.30	69.80
1969—March	70.30	68.30	71.70
June	74.60	72.60	72.20
September	76.00	73.90	73.60
December	80.80	78.70	75.00
1970—March	74.30	72.50	77.10
June	81.10	79.10	78.80
September	82.10	80.70	80.00
December	87.50	86.10	81.90
1971—March	83.70	82.10	87.50
June	91.50	89.70	88.50

(a) See explanatory notes on page 171.

Survey of weekly earnings and hours

Sample surveys in respect of most private employers subject to pay-roll tax (i.e., those paying more than \$400 per week in wages and salaries) have been conducted as at the last pay period in October during recent years.

Details of earlier surveys are contained in *Victorian Year Books* from 1966 onwards.

In addition to obtaining data for the calculation of average weekly earnings, average weekly hours paid for, and average hourly earnings, the surveys carried out in recent years obtained information on overtime and ordinary time earnings and hours for full-time employees (other than managerial, etc., staff).

Coverage

The results of the surveys are based on returns from stratified random samples of private employers subject to pay-roll tax. Employees in rural industry and in private domestic service are excluded because most employers in these two industries are not subject to pay-roll tax. Also excluded from the surveys are employees of government and semi-government authorities, and employees of religious, benevolent, and other similar organisations exempt from pay-roll tax. The earnings and hours of waterside workers employed on a casual basis are excluded because they are subject to wide fluctuations for short periods such as those covered by these surveys.

Since the surveys are based on samples the resultant estimates are subject to sampling variability, that is, variations which might occur by chance because only a sample of employers is surveyed. The extent of detail published is determined after considering estimated measures of sampling variability. In addition to affecting the results of each sample survey, sampling variability also affects comparison between each year's results.

The industry classification adopted for earnings and hours surveys from 1963 onwards is that used for the 1961 and 1966 Population Censuses.

Definitions of the terms used in the following tables may be found in the bulletin, *Survey of Weekly Earnings and Hours*, October 1970, available from the Commonwealth Bureau of Census and Statistics. This publication also contains further information on the construction of the sample, and more detailed tables.

VICTORIA—AVERAGE EARNINGS AND HOURS OF FULL-TIME
EMPLOYEES (OTHER THAN MANAGERIAL, ETC., STAFF) (a)
CLASSIFIED BY INDUSTRY GROUPS, OCTOBER 1970 (b)

Industry group	Average weekly earnings (\$)				Average weekly hours paid for				Average hourly earnings (\$)			
	Adult males	Junior males	Adult females	Junior females	Adult males	Junior males	Adult females	Junior females	Adult males	Junior males	Adult females	Junior females
Manufacturing—												
Founding,												
engineering,												
vehicles, etc.	79.20	37.70	(d)	(d)	44.2	40.9	(d)	(d)	1.79	0.92	(d)	(d)
Other	78.20	39.50	(d)	(d)	44.0	41.1	(d)	(d)	1.78	0.96	(d)	(d)
Total manufacturing	78.60	38.60	44.30	30.50	44.1	41.0	39.6	39.3	1.78	0.94	1.12	0.78
Non-manufacturing	80.00	40.70	50.30	34.40	42.5	40.5	38.8	38.6	1.88	1.01	1.30	0.89
All industry groups (c)	79.10	39.60	46.40	33.10	43.5	40.8	39.3	38.8	1.82	0.97	1.18	0.85

For footnotes, see end of following table.

**VICTORIA—AVERAGE WEEKLY EARNINGS OF FULL-TIME EMPLOYEES
(OTHER THAN MANAGERIAL, ETC., STAFF) (a) CLASSIFIED BY
INDUSTRY GROUPS, OCTOBER 1968, 1969, and 1970 (b)**
(\$)

Industry group	Average weekly earnings											
	Adult males			Junior males			Adult females			Junior females		
	October 1968	October 1969	October 1970	October 1968	October 1969	October 1970	October 1968	October 1969	October 1970	October 1968	October 1969	October 1970
Manufacturing— Founding, engineering, vehicles, etc.	70.60	73.80	79.20	35.80	37.30	37.70	(d)	(d)	(d)	(d)	(d)	(d)
Other	67.60	73.10	78.20	34.20	37.40	39.50	(d)	(d)	(d)	(d)	(d)	(d)
Total manufacturing	68.90	73.40	78.60	34.90	37.30	38.60	37.80	40.80	44.30	26.20	28.40	30.50
Non-manu- facturing	69.00	74.00	80.00	34.20	36.60	40.70	41.90	45.50	50.30	27.40	30.70	34.40
All industry groups (c)	69.00	73.60	79.10	34.60	37.00	39.60	39.20	42.50	46.40	26.90	29.90	33.10

(a) Private employees only.

(b) Last pay period in October.

(c) Excludes rural industry and private domestic service.

(d) Information not available because the figures are subject to sampling variability too high for most practical uses.

**VICTORIA—AVERAGE WEEKLY EARNINGS OF FULL-TIME
MANAGERIAL, EXECUTIVE, ETC., STAFF (a) CLASSIFIED BY
INDUSTRY GROUPS, OCTOBER 1968, 1969, and 1970 (b)**
(\$)

Industry group	Average weekly earnings					
	Males			Females (d)		
	October 1968	October 1969	October 1970	October 1968	October 1969	October 1970
Manufacturing	110.60	117.90	128.10	60.60	64.90	72.70
Non-manufacturing	112.00	119.50	132.30	63.50	68.00	71.30
All industry groups (c)	111.30	118.70	130.40	62.50	67.10	71.70

(a) Private employees only. Includes managerial, executive, professional, and higher supervisory staff.

(b) Last pay period in October.

(c) Excludes rural industry and private domestic service.

(d) Australian figures only are available for females because of the small number involved by States.

Basic wage

Until June 1967 the concept of a "basic" or "living" wage was common to rates of wage determined by industrial authorities in Australia.

Initially the concept was interpreted as the "minimum" or "basic" wage necessary to maintain an average employee and his family in a reasonable state of comfort. However, it came to be generally accepted "that the wage should be fixed at the highest amount which the economy can sustain and that the 'dominant factor' is the capacity of the community to carry the resultant wage levels". (See Commonwealth Arbitration Reports, Vol. 77, page 494.)

In addition to the basic wage, "secondary" wage payments, including margins for skill, loadings, and other special considerations peculiar to the occupations or industry, were determined by Commonwealth and State industrial authorities. The basic wage, plus the "secondary wage", where prescribed, made up the "minimum" wage for a particular occupation. The term "minimum wage" (as distinct from basic wage) is currently used to express the lowest rate payable for a particular occupation or industry.

Wage determinations

In all States, including Victoria, wages are determined in two ways. First, for industries which extend beyond the boundaries of any one State, the total wage is determined by the Commonwealth Conciliation and Arbitration Commission. Second, industrial tribunals, which in Victoria are Wages Boards, are set up for industries which do not extend beyond the State boundary. (For further information on industrial arbitration, see page 163.) The Boards constituted from representatives of employers and employees and an independent chairman for each industry group or calling, determine the minimum rate of wage to be paid in each industry or calling.

Commonwealth wage determinations

1. *Basic Wage 1907.* The first basic wage, as such, was declared in 1907 by Mr Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration. The rate of wage declared as appropriate for a "family of about 5" was 70c per day or \$4.20 per week for Melbourne, and because it arose from an application by H. V. McKay that the remuneration of labour employed at the Sunshine Harvester Works was "fair and reasonable" it became popularly known as the "Harvester Judgment", and this standard was adopted by the Commonwealth Court of Conciliation and Arbitration for incorporation in its early awards.

2. *Wage inquiries and judgments from 1907 to 1969.* The total wage decision of the Conciliation and Arbitration Commission in June 1967 eliminated basic wages and margins from Commonwealth Awards and Victorian Wages Boards' Determinations, and introduced the total wage concept. Detailed particulars of all wage inquiries and judgments from 1907 to 1969 may be obtained in previous *Victorian Year Books* and *Labour Reports*.

3. *National Wage Case, 1970.* The following judgments were handed down :

- (a) The rates in clause 3 of Part 1 of the Metal Trades Award, minimum wages for adult males, were increased by \$4.00 per week.
- (b) The rates for males and females appearing generally in clause 4 (b) of Part 1 of the Metal Trades Award were increased by 6 per cent.
- (c) The variations operated from the beginning of the first pay period to

commence on or after 1 January 1971 and will remain in force until 30 September 1971.

(d) Rates appearing in the Vehicle Industry Award, the Furnishing Trades Award, and the Federal Meat Industry Interim Award were increased by 6 per cent in a similar manner.

(e) Public Service rates were increased by 6 per cent from the beginning of the first pay period to commence on or after 1 January 1971.

(f) The increase could be applied to other awards depending upon decisions of the arbitrators.

Further references, 1971

A table of selected basic weekly rates of wage is shown below. A complete table of basic wage rates in shillings and pence is given on pages 493-4 of the *Victorian Year Book* 1964.

MELBOURNE—BASIC WEEKLY WAGE RATES FIXED BY COMMONWEALTH CONCILIATION AND ARBITRATION COMMISSION (adult males) (\$)

Year (a)	Amount	Year (a)	Amount	Year (a)	Amount
1923	9.15	1936	6.90	1949	13.00
1924	8.45	1937	7.70	1950	16.20
1925	8.75	1938	7.90	1951	19.90
1926	8.90	1939	8.00	1952	22.80
1927	9.00	1940	8.40	1953—August	23.50
1928	8.60	1941	8.80	1956—June	24.50
1929	9.00	1942	9.70	1957—May	25.50
1930	8.30	1943	9.80	1958—May	26.00
1931	6.34	1944	9.80	1959—June	27.50
1932	6.17	1945	9.80	1961—July	28.70
1933	6.28	1946	10.60	1964—June	30.70
1934	6.40	1947	10.90	1966—July	32.70
1935	6.60	1948	12.00	1967—July	(b)

(a) The system of making regular quarterly adjustments was instituted in 1922 and was discontinued after the August 1953 adjustment. From 1923 to 1952 the rate ruling at 31 December, the middle of the financial year, is shown.

(b) From July 1967 basic wages and margins were deleted from awards and wage rates expressed as total wages.

MELBOURNE—MINIMUM WEEKLY WAGE RATES FIXED BY COMMONWEALTH CONCILIATION AND ARBITRATION COMMISSION (adult males) (\$)

Date operative (a)	Amount
1966 11 July	36.45
1967 1 July	37.45
1968 25 October	38.80
1969 19 December	42.30
1971 1 January	46.30

(a) Rates are operative from the beginning of the first pay period commencing on or after the date shown.

Commonwealth wage rates for females

Over the years judgments of the Court proportioned the minimum or basic weekly wage for adult females at varying percentages of the corresponding male rate.

In the *Equal Pay Cases*, 1969, two branches of the Commonwealth Conciliation and Arbitration Commission jointly decided in June 1969 that there was no real bar either "conceptual or economic" to a consideration of "equal pay for equal work". However, the view of the Commission was that the equality of the work must be first determined and principles were set out in the judgment to be applied in deciding applications. Where an arbitrator or commissioner was satisfied that equal pay should be awarded the implementation was to be spread over a period according to defined scales.

Details of judgments affecting wage rates for adult females may be obtained in the *Victorian Year Book* 1970 and *Labour Reports*.

Wages Board determinations in Victoria

1. *General*. By an amendment to the *Factories and Shops Act* 1934, Wages Boards were given discretionary power to include in their determinations appropriate provisions of relevant Commonwealth awards. A further amendment to this Act in 1937 made it compulsory for Wages Boards to adopt such provisions of the Commonwealth awards. This amending Act also gave Wages Boards power to adjust wage rates "with the variation from time to time of the cost of living as indicated by such retail price index numbers published by the Commonwealth Statistician as the Wages Board considers appropriate". The Wages Boards thus adopted the basic wages declared by the Commonwealth Court of Conciliation and Arbitration (now Commonwealth Conciliation and Arbitration Commission) and followed that Court's system of adjusting the basic wage in accordance with variations in retail price index numbers.

2. *Quarterly adjustments 1953 to 1956*. After the system of automatic adjustment of the Commonwealth basic wage was discontinued, a number of Wages Boards met in September 1953 and deleted references to these adjustments. However, an amendment to the *Factories and Shops Act* in November 1953 required Wages Boards to provide for automatic adjustment of wage rates in accordance with variations in retail price index numbers.

In general, this requirement was repeated by the *Labour and Industry Act* 1953 which replaced the *Factories and Shops Act* 1928. An amendment to this new Act, proclaimed on 17 October 1956, deleted the automatic adjustment provision and directed Wages Boards in determining wage rates to take into consideration relevant awards of, or agreements certified by, the Commonwealth Conciliation and Arbitration Commission. The last automatic quarterly adjustment of the basic wage, based on the variation in retail price index numbers for the June quarter 1956, became payable from the beginning of the first pay period in August 1956.

3. *Minimum wage—adult males*. Subsequent to the Commonwealth Conciliation and Arbitration Commission's decision of 8 July 1966 to insert minimum wage prescriptions in Federal awards in an attempt to grant some economic relief to adult male low wage earners, the prescribed minimum wage payable in Victoria (other than Yallourn and the Hazelwood Power Station) since 1 January 1971 has been \$46.30. A substantial number of Wages Boards

have incorporated similar wage clauses in their determinations. The minimum wage provisions do not apply to females nor to any male employee who during any week receives "over-award" payments which are in excess of the prescribed minimum wage for work performed for ordinary hours.

VICTORIA—WAGES BOARDS' DETERMINATIONS

Date operative (a)	Adult males	Adult females
1967 1 July	\$1.00	\$1.00
1968 25 October	\$1.35	\$1.35
1969 19 December	3 per cent	3 per cent
1971 1 January	6 per cent	6 per cent

(a) Operative from the beginning of the first pay period commencing on or after the date shown.

4. *Total wage.* Since the implementation in Victoria from 7 August 1967 of the total wage concept and the consequent elimination of basic wage and margins from Wages Boards' Determinations, both adult male and adult female weekly rates have been increased as shown in the above table. Details for periods prior to this are available in *Wage Rates and Earnings* bulletins and *Labour Reports*.

Wage margins

Until June 1967 wage margins were defined as "minimum amounts awarded above the basic wage to particular classifications of employees for the features attaching to their work which justify payments above the basic wage, whether those features are the skill or experience required for the performance of that work, its particularly laborious nature, or the disabilities attached to its performance". (See Commonwealth Arbitration Reports, Vol. 80, page 24.)

The total wage decision of the Conciliation and Arbitration Commission in June 1967 eliminated basic wages and margins from Commonwealth Awards and Victorian Wages Boards' Determinations, and introduced the total wage concept.

Detailed particulars of judgments affecting wage margins may be obtained in previous *Victorian Year Books* and *Labour Reports*.

Annual leave

From 1936, when the Commonwealth Court of Conciliation and Arbitration granted one week's annual leave on full pay to employees in the commercial printing industry, annual leave has been introduced industry by industry when and if the Judge responsible for the industry considered it proper.

A number of inquiries into annual leave have been conducted and a summary of the most recent follows.

The Commonwealth Conciliation and Arbitration Commission declared its judgment on annual leave on 18 April 1963 and varied the Metal Trades Award by granting three weeks annual leave. This provided a new standard for secondary industry in other Federal awards. As a result, Victorian Wages Boards altered provisions of their determinations to grant employees an extra week's leave. A fuller treatment of this judgment is given on pages 436-7 of the *Victorian Year Book* 1965.

A claim for four weeks annual leave was dismissed on 7 December 1971.

The Labour and Industry (Annual Holidays) Order, made under authority of the *Labour and Industry Act* 1958, became operative from 1 April 1967 and granted three weeks annual holidays on ordinary pay to those

employees not provided for by any determination of a Wages Board or Industrial Appeals Court.

Long service leave

1. *Victoria.* The *Factories and Shops (Long Service Leave) Act 1953* first provided for long service leave for workers in Victoria. The provisions of this Act were subsequently incorporated in the Labour and Industry Act which provided for thirteen weeks leave after twenty years continuous service with the same employer. In 1965 the qualifying period was reduced to fifteen years.

2. *Commonwealth.* The applicability of long service leave provisions under State law to workers under Federal awards has been tested before the High Court and the Privy Council, and such provisions have been held to be valid.

Before 1964 the Commonwealth Conciliation and Arbitration Commission had not included provisions for long service leave in its awards. The Commission gave its judgment on the Long Service Leave case on 11 May 1964. The main provisions of the judgment were that in respect of service after 11 May 1964 (or in New South Wales, 1 April 1963) entitlement to the first period of long service leave would be calculated at the rate of thirteen weeks for fifteen years unbroken service; and after a further period or periods of ten years, employees would be entitled to an additional *pro rata* period of leave calculated on the same basis.

Industrial disputes

The collection of information relating to industrial disputes involving stoppage of work was initiated by the Commonwealth Statistician in 1913 and figures have been published regularly ever since.

For these statistics an industrial dispute is defined as a withdrawal from work by a group of employees or a refusal by an employer or a number of employers to permit some or all of their employees to work; each withdrawal or refusal being made in order to enforce a demand, to resist a demand, or to express a grievance. Stoppages of work not directly connected with terms and conditions of employment (e.g., political matters, fining and gaoling of persons) are included in the statistics.

The statistics relate only to disputes involving stoppages of work of ten man-days or more *in the establishments where the stoppages occurred*. Effects on other establishments because of lack of materials, disruption of transport services, power cuts, etc., are not measured by these statistics.

The statistics of industrial disputes are compiled from data obtained from the following sources: (a) direct collections from employers and trade unions concerning individual disputes; (b) reports from government departments and authorities; (c) reports of State and Commonwealth industrial authorities; and (d) information contained in trade journals, employer and trade union publications, and newspaper reports. Particulars of some stoppages (e.g., those involving a large number of establishments) may be estimated and the statistics therefore should be regarded as giving a broad measure of the extent of stoppages of work (as defined).

An industrial dispute occurring in more than one State is counted as a separate dispute in each State. A dispute involving workers in more than one industry group in a State or Territory is counted once only in the number of disputes—in the industry group that has the largest number of workers involved; but workers involved, working days lost, and estimated loss in wages are allocated to their respective industry groups. Disputes not settled at the end of a year are included as new disputes in the figures for the following year. Disputes not settled at the end of a quarter are not

counted in the number of disputes for the following quarter, but additional workers involved and working days and wages lost are included.

The following tables give statistics of the numbers of industrial disputes and workers involved, numbers of working days lost, and the estimated loss in wages:

VICTORIA—INDUSTRIAL DISPUTES (a)

Year	Number of disputes	Number of workers involved			Number of working days lost
		Directly	Indirectly (b)	Total	
		'000	'000	'000	'000
1966	179	99.6	1.9	101.5	219.6
1967	212	83.2	1.3	84.5	107.3
1968	327	169.3	3.5	172.8	243.9
1969	367	336.7	19.7	356.4	717.2
1970	447	324.0	9.1	333.0	510.8

(a) Refers only to disputes involving a stoppage of work of ten man-days or more.

(b) Persons placed out of work at the establishments where the stoppages occurred but not themselves parties to the disputes.

VICTORIA—INDUSTRIAL DISPUTES (a): INDUSTRY GROUPS

Year	Mining and quarrying	Manufacturing	Building and construction	Transport		Other groups	All groups
				Stevedoring	Other		
NUMBER OF DISPUTES							
1966	1	114	30	17	11	6	179
1967	2	119	39	29	6	17	212
1968	1	122	76	101	12	15	327
1969	1	159	81	90	19	17	367
1970	1	207	64	130	17	28	447
WORKERS INVOLVED (DIRECTLY AND INDIRECTLY) ('000)							
1966	1.1	55.1	19.3	1.2	15.9	8.9	101.5
1967	0.1	55.1	6.1	14.3	2.7	6.3	84.5
1968	(b)	71.6	31.8	41.0	17.7	10.6	172.8
1969	..	127.6	41.2	68.3	85.1	34.0	356.4
1970	0.1	112.1	46.7	92.5	25.0	56.5	333.0
WORKING DAYS LOST ('000)							
1966	2.3	123.2	41.2	0.6	41.8	10.5	219.6
1967	0.6	75.7	12.8	8.6	1.6	8.0	107.3
1968	0.2	128.9	40.9	35.0	18.0	20.8	243.9
1969	4.9	344.6	101.6	84.0	127.9	54.2	717.2
1970	0.5	206.4	183.2	47.8	23.6	49.3	510.8
ESTIMATED LOSS IN WAGES (\$'000)							
1966	23.4	1,163.1	394.8	6.4	414.9	94.6	2,097.2
1967	8.1	774.7	147.9	92.4	19.2	64.4	1,106.6
1968	2.5	1,395.0	553.8	359.1	215.9	205.1	2,731.3
1969	116.7	4,170.1	1,563.8	926.5	1,249.7	593.0	8,619.6
1970	10.5	2,651.8	2,689.1	561.6	295.1	585.6	6,793.7

(a) Refers only to disputes involving a stoppage of work of ten man-days or more.

(b) Less than 50.

Industrial safety

Industrial injuries, like other injuries, cause human suffering and personal loss, and the original approach to industrial safety was based on humanitarian motives. More recently it has been realised that industrial accidents also

cause economic loss to the community. Efforts for the prevention of accidents must be directed along three lines: (1) to make the working environment safer; (2) to educate people to work more safely; and (3) to have recourse to law where appropriate. Several departments and authorities now have particular statutory responsibilities for particular aspects of industrial safety, but the general responsibility lies with the Department of Labour and Industry through the *Labour and Industry Act* 1958 and associated legislation.

The most important Acts and Regulations concerning industrial safety regulations and inspections, with reference to the administrative authority responsible in each case, have been dealt with in previous *Victorian Year Books*.

Workers compensation

Legislation has been provided by all State Parliaments, and in Commonwealth Territories and for Commonwealth Government employees, for compensation to be paid to injured workers. The details which follow refer to the legislation in force in Victoria.

The first workers compensation legislation in Victoria was passed in 1914 to give certain industrial workers and their dependants the right to claim limited compensation from their employer, without proof of negligence or breach of statutory duty by the employer, in respect of accidental injuries sustained by them arising out of and in course of their employment.

Since the passing of the original legislation the class of persons entitled to benefit, the scope of employment, the types of injuries included, and the extent of the benefits have all been greatly widened by frequent amendments, which were consolidated by the *Workers Compensation Act* 1958.

The general principle of the legislation is to cover workers who have entered into or work under a contract of service or apprenticeship with an employer, whether by way of manual labour, clerical work, or otherwise. Such workers are also protected, while travelling to and from work, during recess periods, or from injury by the recurrence, aggravation, or acceleration of pre-existing injury where employment is a contributing factor.

As the law now stands any worker is covered who is not an outworker or whose remuneration does not exceed \$6,000 a year (excluding overtime).

It is compulsory for every employer (with the exception of certain schemes approved by the Board) to obtain from the State Accident Insurance Office, or from an insurance company approved by the Governor in Council, a policy of accident insurance for the full amount of his liability under the Act.

Judicial administration is carried out by a County Court Judge, sitting with workers' and employers' representatives as the Workers Compensation Board.

The extent of the principal benefits obtained under the *Workers Compensation Act* 1958 are:

1. *Where death results from the injury—*

(a) If the worker leaves full dependants, compensation payable is \$11,834 plus \$263 for each child under 16 years.

(b) If the worker leaves partial dependants, the amount of compensation shall be a sum reasonable and proportionate to the injury, but not exceeding the sum of \$11,834, as is awarded by the Workers Compensation Board.

(c) If the worker has no dependants, reasonable medical and burial expenses are payable.

(d) If the worker was a minor leaving no dependants but had contributed towards the maintenance of the home or of members of his family, such members are deemed to be partial dependants.

2. *Where total incapacity for work results from the injury—*

The weekly payment during the total incapacity is \$26 for an adult worker (\$24 for a minor) or his average weekly earnings, whichever is the least, plus \$8 for his wife or relative standing in *loco parentis* to the children, if the wife or relative is fully or mainly dependent on the earnings of the worker, plus \$3 for each dependent child under sixteen years of age.

The combined total weekly payment is limited to the worker's average weekly earnings or \$41 for an adult (\$34 for a minor), whichever is the least, and the whole maximum amount payable is limited to \$13,149 unless the Workers Compensation Board otherwise determines.

3. *Where partial incapacity results from the injury—*

(a) The worker is paid an amount which is calculated according to the variation between his average weekly earnings before injury and the average weekly amount he is earning or is able to earn after injury.

(b) Where the worker is unable to obtain employment for which he is fit, the Board may order that he be treated as totally incapacitated.

4. *Other miscellaneous benefits—*

(a) In addition to compensation, legislation provides for the payment of the reasonable cost of hospital, medical, nursing and ambulance services, payable whether or not the worker is incapacitated. Reasonable funeral expenses are also payable.

(b) Coverage is provided where a worker contracts an industrial disease and the definition of "injury" specifically includes a disease contracted during the course of work which contributed to the disease.

(c) Lump sum payments in redemption of weekly payments in respect of total or partial incapacity may be made at any time upon application by either party but at the absolute discretion of the Board which fixes the amount.

More detailed particulars of workers compensation legislation may be obtained in the *Conspectus of Workers Compensation Legislation in Australia and Papua New Guinea* published by the Department of Labour and National Service and the *Labour Report*.

The amount paid in claims during 1969–70 was allocated as follows :

A. Under Workers Compensation Act—			
(a) Compensation		\$'000	\$'000
1. Compensation		9,562	
2. Lump sum—death		4,767	
3. Lump sum—maim		3,448	
			17,777
(b) Medical, etc., services			
1. Doctor		4,522	
2. Hospital		2,953	
3. Chemist or registered nurse		263	
4. Ambulance		134	
5. Other curative, etc., services		480	
			8,352
(c) Legal costs, etc.			3,837
B. Under other Acts and at common law, damages, etc.			4,344
Total			34,310

The following table shows details of workers compensation business transacted during each of the years 1965-66 to 1969-70 :

VICTORIA—WORKERS COMPENSATION BUSINESS

Year	Wages on which premiums were charged	Gross premiums received less adjustments	New claims arising during year		Claims paid during year	Claims outstanding at end of year
			Fatal	Non-fatal		
	\$'000	\$'000			\$'000	\$'000
1965-66	2,404,459	48,816	525	205,735	24,925	42,277
1966-67	2,730,791	52,521	490	203,537	25,787	48,864
1967-68	2,979,540	54,797	(a) 718	204,057	29,828	56,224
1968-69	3,286,808	57,160	663	203,111	32,528	63,487
1969-70	3,455,975	60,396	683	205,034	34,310	69,544

(a) The rise in the number of fatal accidents arising during 1967-68 was due partly to a change in recording methods.

Figures for premiums and claims in this table differ somewhat from those shown on pages 666-7 of the Finance section of this *Year Book*. In that section most schemes of compensation are not included and the figures shown do not always relate strictly to the financial year, as some insurance companies close their books at other times. With regard to claims paid, the Finance section refers to claims paid during the period, plus claims outstanding at the end of the period, less outstanding claims at the beginning.

Industrial accidents

Official collection of data on industrial accidents in Victoria was first undertaken when Regulations under the Workers Compensation Act were amended in 1957. Benefits to be obtained under the *Workers Compensation Act* 1958 are set out on pages 181-2.

Source

The *Workers Compensation Act* 1958 requires all insurance companies which insure against workers compensation and organisations with approved workers compensation schemes to submit to the Government Statist a report on each claim for workers compensation when the claim is closed, or at the expiry of three years if the claim is unclosed at the end of that time.

Scope

1. Each original claim is considered to be a separate "industrial accident" and although reports are received of re-opened claims details are not included in published statistics.
2. At present the collection is restricted to fatal cases, and those where the worker is incapacitated for work for a period of one week or more.
3. Although some employers do insure against liability for employees whose income exceeds \$6,000 (the amount specified in the Act), it is not mandatory to do so and consequently some employees in this category may not be included in the tabulations.
4. Commonwealth Government employees are exempt from the State Act and are covered exclusively by the *Commonwealth Employees' Compensation Act* 1968. Consequently some industry classifications are not covered at all while coverage is reduced in some instances (e.g., defence services and communications).

5. Self employed persons, with the exception of certain contractors as defined in the Act, are also not covered and therefore industrial accidents occurring to them will not appear in published statistics. This is likely to have considerable effect when considering, for instance, rural industries.

Definitions

1. *Industrial accident.* A compensated work injury causing death, permanent disability, or absence of the injured person from work for one week or more, excluding journey cases, cases occurring during a recess period, and all disease cases except where the disease is considered to be precipitated or aggravated by an accidental event.

2. *Industry group.* In Victoria, employers are rated for the purpose of workers compensation premiums according to the type of business conducted, a premium being fixed for each "trade", and all employees, regardless of occupation, take the "trade" classification of their employer with the exception of clerical workers and domestics. When the list of "trades" was compiled by insurers, it was allied closely with the industry classification used for the 1947 Census. This has been brought up to date from time to time and accordingly, the industry groups shown here approximate to those used for Census purposes. However, as "communication" employees are almost exclusively employed by the Commonwealth, and are consequently exempt from the provisions of the State Act, the remaining small numbers are included with "transport". Also "finance" employees, whose work is normally of a clerical nature are included with "other" industry together with clerical workers generally, who are subject to a special premium rate distinct from that charged for the industry in which they are employed. It should be noted that in 1969-70 accidents to employees of the Gas and Fuel Corporation and the State Electricity Commission are included under the industry group "electricity, gas, water, and sanitary services" and accidents to employees of the Victorian Railways and the Melbourne and Metropolitan Tramways Board are included under the industry group "transport, storage, and communication". Figures for employees of other authorities are also included in their correct industry group where possible, i.e., "primary", "mining", "manufacturing", and "building and construction". However, it has not been possible to allocate all government authorities and the balance are still shown under "government, semi-government, finance, and other". Except for "commerce" and "amusement, etc." figures for individual industry groups are not comparable between 1969-70 and earlier years.

3. *Accident factor.* This should not be interpreted as "cause of accident". In general it is defined as "that underlying agency, other than human failing, which appears to contribute most materially to an accident, and which would be most likely to receive attention in efforts to prevent occurrence of similar accidents".

4. *Injury site.* In most cases the injury has been allocated to that part of the body affected by the injury. However, since effects of poisons, electrocutions, weather, etc., cannot be assigned in most cases to any particular site, they are included in the heading "general and unspecified".

The following table shows the number of fatal and non-fatal industrial accidents to males in each industry group for each of the years 1967-68 to 1969-70 :

**VICTORIA—NUMBER OF INDUSTRIAL ACCIDENTS TO MALES
BY INDUSTRY GROUP**

Industry group	Number of accidents					
	1967-68		1968-69		1969-70	
	Fatal	Non-fatal	Fatal	Non-fatal	Fatal	Non-fatal
Primary	4	1,569	5	1,451	2	1,517
Mining and quarrying	1	127	..	128	..	111
Manufacturing	16	11,798	12	10,998	9	10,964
Electricity, gas, water, sanitary	1	275	..	288	4	1,153
Building and construction	3	3,560	8	3,444	6	3,326
Transport, storage, and communication	1	1,596	7	1,710	14	2,586
Commerce	2	3,477	3	3,358	2	3,374
Community services, etc.	1	1,483	4	1,392	1	1,012
Amusement, personal service, etc.	..	690	..	715	..	710
Government, semi-government, finance, and other, n.o.c.	11	3,621	11	3,145	11	2,457
Total	40	28,196	50	26,629	49	27,210

NOTE. See page 184 for note on comparability.

The following table shows the number of non-fatal industrial accidents to females in each industry group for each of the years 1967-68 to 1969-70 :

**VICTORIA—NUMBER OF INDUSTRIAL ACCIDENTS
TO FEMALES, BY INDUSTRY GROUP**

Industry group	Number of non-fatal accidents		
	1967-68	1968-69	1969-70
Primary	85	92	78
Mining and quarrying	..	..	..
Manufacturing	2,304	2,120	1,997
Electricity, gas, water, sanitary	..	..	7
Building and construction	..	..	4
Transport, storage, and communication	11	5	79
Commerce	607	551	613
Community services, etc.	812	792	702
Amusement, personal service, etc.	490	408	480
Government, semi-government, finance, and other, n.o.c.	445	435	649
Total	4,754	4,403	4,609

NOTE. See page 184 for note on comparability.
In addition to the above non-fatal accidents, the following fatal accidents to females were reported:
1 in the commerce industry group in 1967-68.
1 in the amusement, personal service, etc., industry group in 1968-69.

Further information in respect of industrial accidents to females has not been included in this *Year Book*, but details may be obtained in the *Industrial Accidents and Workers Compensation* bulletin issued annually by this Office.

The following table shows the period of incapacity and the cost of claims incurred through non-fatal industrial accidents to males in each industry group for each of the years 1967-68 to 1969-70 :

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES: PERIOD OF INCAPACITY AND COST OF CLAIMS, BY INDUSTRY GROUP

Industry group	Period of incapacity			Cost of claims		
	1967-68	1968-69	1969-70	1967-68	1968-69	1969-70
	weeks	weeks	weeks	\$'000	\$'000	\$'000
Primary	7,467	6,736	6,392	418	470	364
Mining and quarrying	767	789	613	63	86	97
Manufacturing	45,859	42,116	40,015	3,852	4,064	3,836
Electricity, gas, water, sanitary	1,012	980	4,946	74	59	483
Building and construction	14,696	14,942	12,893	1,291	1,365	1,134
Transport, storage, and communication	6,045	6,663	11,372	382	412	836
Commerce	11,519	11,845	11,142	762	832	767
Community services	6,624	5,866	4,219	419	357	247
Amusement, personal service, etc.	2,809	3,179	3,413	169	179	222
Government, semi-government, finance, and other, n.o.c	15,313	13,884	9,971	1,142	931	716
Total	112,111	107,001	104,976	8,572	8,755	8,703

NOTE. See page 184 for note on comparability.

The following table shows the number of non-fatal industrial accidents to males, by accident factor and industry group, for the year 1969-70 :

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES: INDUSTRY GROUP BY ACCIDENT FACTOR, 1969-70

Industry group	Accident factor								
	Machinery	Vehicles	Electricity, etc. (a)	Harmful substances	Falling, slipping	Stepping on objects (b)	Handling objects (c)	Hand tools (d)	Other and unspecified
Primary	104	82	37	9	306	70	566	142	201
Mining and quarrying	6	9	2	4	21	7	50	7	5
Manufacturing	1,382	236	386	87	1,834	622	5,288	856	273
Electricity, gas, water, sanitary	32	41	28	6	292	68	571	73	42
Building and construction	153	80	48	17	876	175	1,605	284	88
Transport, storage, and communication	71	265	34	3	745	108	1,250	54	56
Commerce	188	127	85	9	698	184	1,452	533	98
Community services	39	57	18	7	308	61	343	31	148
Amusement, personal service, etc.	17	12	31	5	178	34	217	41	175
Government, semi-government, finance, and other, n.o.c.	69	113	38	9	732	135	1,132	102	127
Total	2,061	1,022	707	156	5,990	1,464	12,474	2,123	1,213

NOTE. See page 184 for note on comparability.

(a) Includes explosions, flames and hot substances.

(b) Includes striking against objects.

(c) Includes strain in handling, struck by objects.

(d) Includes power-operated.

The following tables show the number of non-fatal industrial accidents to males, by industry group, site of injury, and type of injury for the year 1969-70 :

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES:
INDUSTRY GROUP BY SITE OF INJURY, 1969-70

Industry group	Site of injury									Total
	Head	Eye	Neck (a)	Trunk	Arm	Hand	Leg	Foot	General and un-specified	
Primary	49	38	36	353	233	336	337	127	8	1,517
Mining and quarrying	8	8	3	32	9	17	22	11	1	111
Manufacturing	261	298	228	3,069	1,280	3,303	1,412	1,068	45	10,964
Electricity, gas, water, sanitary	41	20	28	426	160	172	201	99	6	1,153
Building and construction	84	105	84	934	421	751	577	356	14	3,326
Transport, storage, and communication	126	36	73	834	342	327	583	259	6	2,586
Commerce	96	75	95	893	434	1,013	508	252	8	3,374
Community services	83	36	72	678	222	301	435	142	6	1,975
Amusement, personal service, etc.	49	8	21	203	95	146	132	53	3	710
Government, semi-government, finance, and other, n.o.c.	53	30	64	537	157	204	300	142	7	1,494
Total	850	654	704	7,959	3,353	6,570	4,507	2,509	104	27,210

NOTE. See page 184 for note on comparability.

(a) Includes vertebral column.

VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES:
INDUSTRY GROUP BY TYPE OF INJURY, 1969-70

Industry group	Type of injury											Total
	Contusions, lacerations, etc.	Burns and scalds	Bone fractures	Dislocations	Sprains and strains	Amputations	Concussion	Internal injury	Effects of poisons	Effects of electricity	Other and unspecified	
Primary	644	43	215	55	498	12	13	5	4	1	27	1,517
Mining and quarrying	49	4	17	1	35	..	3	..	..	1	1	111
Manufacturing	4,387	494	1,480	261	3,945	156	42	20	24	15	140	10,964
Electricity, gas, water, sanitary	365	28	170	32	529	5	7	..	2	1	14	1,153
Building and construction	1,244	73	550	85	1,273	26	10	9	4	7	45	3,326
Transport storage and communication	860	40	384	66	1,163	10	24	4	..	3	32	2,586
Commerce	1,494	98	368	115	1,222	13	18	8	1	2	35	3,374
Community services	541	45	246	85	992	9	19	9	1	2	26	1,975
Amusement, personal service, etc.	213	38	157	34	232	3	17	4	2	1	9	710
Government, semi-government, finance, and other, n.o.c.	443	25	173	66	725	7	12	5	2	2	34	1,494
Total	10,240	888	3,760	800	10,614	241	165	64	40	35	363	27,210

NOTE. See page 184 for note on comparability.

The table which follows shows the number of non-fatal industrial accidents to males, by accident factor and site of injury, for the year 1969-70 :

**VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES:
ACCIDENT FACTOR (a) BY SITE OF INJURY, 1969-70**

Accident factor	Site of injury									
	Head	Eye	Neck (b)	Trunk	Arm	Hand	Leg	Foot	General and un- speci- fied	Total
Machinery	42	101	8	42	141	1,579	76	68	4	2,061
Vehicles	147	8	39	174	139	133	213	161	8	1,022
Electricity, etc. (a)	71	34	1	36	83	167	106	176	33	707
Harmful substances	7	39	..	6	12	32	6	15	39	156
Falling, slipping	193	12	157	1,639	947	392	2,301	344	5	5,990
Stepping on objects (a)	82	14	21	138	255	326	437	191	..	1,464
Handling objects (a)	195	100	423	5,612	1,453	2,371	949	1,370	1	12,474
Hand tools (a)	28	130	11	46	188	1,448	149	123	..	2,123
Other and unspecified	85	216	44	266	135	122	270	61	14	1,213
Total	850	654	704	7,959	3,353	6,570	4,507	2,509	104	27,210

(a) For footnotes see page 186.

(b) Includes vertebral column.

The table which follows shows the age groups of males involved in non-fatal industrial accidents, by accident factor, for the year 1969-70 :

**VICTORIA—NON-FATAL INDUSTRIAL ACCIDENTS TO MALES:
ACCIDENT FACTOR (a) BY AGE GROUP, 1969-70**

Accident factor	Age group (years)						Total
	Under 20	20-29	30-39	40-49	50-59	60 and over	
Machinery	281	633	422	379	238	108	2,061
Vehicles	97	281	244	192	153	55	1,022
Electricity, etc. (a)	88	216	161	135	75	32	707
Harmful substances	14	41	27	41	26	7	156
Falling, slipping	418	1,249	1,362	1,435	1,061	465	5,990
Stepping on objects (a)	131	322	311	321	274	105	1,464
Handling objects (a)	795	2,805	2,892	2,989	2,163	830	12,474
Hand tools (a)	373	726	434	332	193	65	2,123
Other and unspecified	118	353	305	235	146	56	1,213
Total	2,315	6,626	6,158	6,059	4,329	1,723	27,210

(a) For footnotes see page 186.

Labour organisations

Registration

1. *Under Trade Union Acts.* In 1884 the Victorian Parliament passed a Trade Union Act, based on an English Act of three years earlier, but the

unions refused to register under it and the Act was amended in 1886. The *Trade Unions Act* 1958 still makes provision for registration on compliance with certain standards. Registration gives a trade union a corporate identity and legal status for the purpose of engaging in strikes. However, registration has never been compulsory and few unions have sought the provisions of the legislation.

2. *Under the Commonwealth Conciliation and Arbitration Act.* Under Part VIII. of the *Conciliation and Arbitration Act* 1904–1970, any association of employers in any industry who have, or any employer who has employed, on an average taken per month, not less than 100 employees during the six months preceding application for registration, or any association of not less than 100 employees in any industry, may be registered. However, the Public Service Arbitration Act provides that an association of less than 100 employees may be registered as an organisation under the Conciliation and Arbitration Act if its members comprise at least three fifths of all persons engaged in that industry in the Service. Such Public Service organisations are included in the figures shown below. Registered unions include both interstate associations and associations operating within one State only. Registration under Commonwealth legislation began in 1906. At the end of 1970 the number of employers' organisations registered under the provisions of the Conciliation and Arbitration Act was 75. The number of unions of employees registered at the end of 1970 was 153, with a membership of 1,939,860 representing 85 per cent of the total membership of all trade unions in Australia.

Trade unions

Historical

Trade unions are continuous associations of wage earners whose ultimate objective is the improvement of industrial conditions of employment. Over the last one hundred years the framework of trade union organisation in Victoria has been radically affected by economic, industrial, political, and technological change. As Australia's union members in the work force constitute one of the highest percentages in the world, the importance of trade unions as socio-economic institutions is obvious.

Before 1850 mutual benefit societies had been set up by groups of workers to provide funeral and sick benefits and unemployment allowances. Typical of this trend was the first society established in Melbourne in 1844 by printing trade workers. In many instances these societies were the forerunners of present day trade unions. There were also isolated instances of workers forming temporary combinations to present a united front to employers. During the period 1850 to 1870, following the influx of people to the goldfields and the resultant development of industry and agriculture, widespread social and economic changes in Victorian society encouraged the formation of trade unions based on the English pattern. The first such union was the Operative Stonemasons Society established in Melbourne in 1850 and in the following year the Typographical Association of Victoria was formed. In some cases the early trade unions collapsed during the peak period of the gold rushes and were re-formed in the late 1850s. The main objective of these early unions was to gain recognition of the principle of an 8 hour day and on 21 April 1856 the Stonemasons Society in Melbourne was the first Australian

union to achieve employer acceptance of this aim. Coach builders and some building workers also gained a similar concession during 1856 and in the latter part of that year the first 8 hour celebration was held in Melbourne.

The original trade unions were almost entirely associations of skilled craftsmen who were concerned with maintaining their position and privileges against the less skilled workers as well as against employers. However, during the 1870s and 1880s this attitude was modified by the influence of ex-Chartist unionists who were concerned with the emancipation of all workmen and by the general level of prosperity. During this period Victoria saw the establishment of unions in such diverse areas as mining (1872), agricultural implement making (1873), seamen (1874), tanners and leather dressers (1875), operative bootmakers (1879), tailoresses (1882), and ironworkers and jappanners (1883). Before the industrial depression and strikes of the 1890s trade unionism had been firmly established in Victoria and although during this difficult period the union movement temporarily lost many of the advantages which it had previously gained, one important result was recognition of the need for direct Parliamentary representation. Although Charles Jardine Don had been a Labor member of the Victorian Parliament during the 1850s the majority of trade unionists held the traditional view that the only legitimate area of concern of a union was with the particular affairs of its own trade. Consequently there was little support for views advanced by some of the more radical union members that the attainment of organised Labor's industrial aims could only be fully achieved by representation in the colonial Parliaments. With the Melbourne Trades Hall Council acting as the co-ordinating body, a Labor political organisation was developed in Victoria and, whereas at the 1889 election only three members who could be considered Labor candidates were returned, in 1894 sixteen Labor members were elected. The decision of trade unions to directly enter the political arena met with a large degree of success and at a comparatively early stage they were able to secure majorities and form governments in some States and the Commonwealth Parliament. Because of the existence of a powerful political wing the Australian trade union movement has, over the years, tended to use political avenues as well as industrial action to seek broad changes.

Present position

By comparison with some other countries, the typical trade union in Australia is quite small, 65 per cent of unions representing approximately 7 per cent of the nation's 2.24 million members. On the other hand, forty to fifty of the larger unions, such as the Australian Workers Union, the metal trades group of unions, the Australian Railways Union, and the Postal Workers Union, account for 75 per cent of the total membership. The same pattern applies to Victoria. It is felt that the continued existence of a large number of small craft-type unions is justified on the grounds that greater attention can be given to the particular problems of members and that management is often prepared to make concessions to a small group which they would not offer to a larger group. On the other hand, the larger industry-based unions are usually able to offer a wider range of facilities to their members at a proportionately lower cost. Generally, they are also in a stronger bargaining position in the pursuit of their industrial objectives. With the growth of industry, there has been some amalgamation and

federalisation of unions as exemplified by the recent amalgamation of the brushmakers with the storemen and packers, the Amalgamated Engineering Union with the sheetmetal workers, and the boilermakers with the blacksmiths. Contemporary conditions are such that trade unions are becoming hybrid and moving more towards an occupational rather than a single or even multi-craft organisational basis. One alternative to amalgamation that has been adopted by a number of unions is to band together in a loose federation to deal with employers on an industry basis. The metal trades, paper, and building industry unions are typical of those who have followed this course.

Victorian trade unions usually have three clearly identifiable operational levels. The union is represented at the plant or factory level by a shop steward who enrolls members, collects dues, and acts as the intermediary between ordinary members and union management. The centre of individual trade union activity and control is at the State or branch level. Normally the State secretary is an elected full-time officer who is, subject to the policy decisions and ultimate control of an honorary president and executive, in charge of the day to day activities of the union. The secretary has the assistance of organisers who visit the individual plants and confer with shop stewards and members. The branches receive members' dues (usually \$16 per annum per member), maintain membership records, and provide personal services such as giving advice on workers compensation and interpreting members' entitlements under the various determinations and awards. Where necessary, the union will either act, or provide legal assistance, for members in industrial matters. Many of the claims which are ultimately heard before industrial tribunals are also prepared at the State branch level.

Most Victorian trade unions are affiliated with the Victorian Trades Hall Council and, because individual union activity is so important at State level, the role of the Trades Hall Council as co-ordinator and spokesman in industrial and political matters is of major significance. The Council Executive consists of the president, vice-president, and eleven members elected by delegates to an annual meeting. No union, irrespective of size, can nominate more than five delegates to attend the meeting. The Secretary and the Assistant Secretary, who are elected full-time officers, are also members of the Executive. In addition to its overall responsibilities, the Council through its Disputes Committee controls strikes which involve more than one union. At the national level the highest policy making and co-ordinating body is a Federal Council in the case of the larger trade unions and since its establishment in 1927, the Australian Council of Trade Unions, which acts for the trade union movement as a whole.

Returns showing membership by States as at 31 December each year are obtained for all trade unions and employee organisations. The affairs of single organisations are not disclosed in the published results and this has assisted in securing complete information. In addition to the number of unions and of members, the following table shows the estimated percentages of wage and salary earners in employment who are members of trade unions. As estimates of wage and salary earners in employment do not include employees engaged in rural industry or in private domestic service, the percentages have been calculated on figures obtained by adding to the end of the year estimates the estimated number of employees in rural industry and in private domestic

service recorded at the nearest available population census. For this reason, and also because the membership of trade unions includes some persons not in employment, the percentages shown in the table must be regarded as approximations.

VICTORIA—TRADE UNIONS

Year	Number of separate unions	Number of members			Proportion of total wage and salary earners		
		Males	Females	Total	Males	Females	Total
		'000	'000	'000	per cent	per cent	per cent
1966	154	415.9	123.4	539.4	54	32	47
1967	151	413.9	131.6	545.5	53	33	46
1968	153	417.6	133.0	550.7	52	32	46
1969	152	421.7	138.0	559.8	52	32	45
1970	156	437.9	153.6	591.5	52	34	46

The following table shows the number of unions and membership classified by industry groups at the end of each of the years 1969 and 1970. The table does not supply a precise classification of trade union members by industry because in cases where the members of a union are employed in a number of industries they have been classified under the predominant industry of the union concerned.

VICTORIA—TRADE UNIONS : INDUSTRY GROUPS

Industry group	1969		1970	
	Number of unions	Number of members	Number of unions	Number of members
		'000		'000
Agriculture, grazing, etc.	2	11.1	2	10.9
Manufacturing—				
Engineering, metals, vehicles, etc.	8	84.8	8	91.6
Textiles, clothing, and footwear	4	45.6	4	50.3
Food, drink, and tobacco	13	26.8	13	26.5
Sawmilling, furniture, etc.	3	7.3	3	7.2
Paper, printing, etc.	5	19.6	5	20.0
Other manufacturing	12	31.6	12	32.3
Total manufacturing	45	215.8	45	227.9
Building and construction	9	35.2	11	35.0
Railway and tramway services	5	23.9	5	23.5
Road and air transport	8	19.7	9	22.7
Shipping and stevedoring	7	7.1	7	7.1
Banking, insurance, and clerical	8	35.1	8	35.6
Wholesale and retail trade	3	18.1	3	22.9
Public authority (n.e.i.), etc. (a)	38	109.4	39	112.7
Amusement, hotels, personal service, etc.	9	16.7	9	17.7
Other industries (b)	18	67.8	18	75.5
Total	152	559.8	156	591.5

(a) Includes communication and municipal, etc.

(b) Includes mining and quarrying and community and business services.

Central labour organisations

Delegate organisations, usually known as Trades Hall Councils or Labour Councils and consisting of representatives from a number of trade unions, have been established in each of the capital cities and in a number of other centres in each State. Their revenue is raised by means of a *per capita* tax on the members of each affiliated union. In most of the towns where such councils exist, the majority of the local unions are affiliated. At the end of 1970 there were in Victoria nine trades and labour councils and 274 unions and branches of unions affiliated. These figures do not necessarily represent separate unions since the branches of a large union may be affiliated with the local trades councils in the several towns in which they are represented.

Employers' associations

Employers' associations arise when groups of employers agree among themselves to adopt a common labour policy, to negotiate common terms of employment, and to be represented jointly on or before industrial tribunals. These functions are, in fact, often performed by bodies which are concerned also with other objectives, such as the elimination of "unfair" trading practices, the enforcement of standards of professional conduct, or the grant of tariff protection and other political concessions. Such objectives are by no means unrelated to industrial matters, since there is an obvious connection between the terms on which goods can be sold and the wages that can be paid to those who have helped to produce them. In some organisations, however, these wider objectives overshadow or supplant the purely industrial. A broad distinction may, therefore, be drawn between (a) employers' associations in the narrower sense of bodies largely, if not primarily, concerned with industrial matters, and (b) other associations with predominantly different objectives, such as chambers of commerce, professional institutes, primary producers' unions, and many trade associations.

Employers' associations, as defined in the former category, first appeared in Victoria in the 1850s, notably in the building trade and the coachbuilding industry. The associations formed at that time, however, seem to have been ephemeral and temporary, their main purpose being to resist pressure for an eight hour day by the early trade unions. "Continuous" or permanent associations of employers did not appear until the 1870s. The Master Builders' Association dates from 1875 and the Victorian Chamber of Manufactures from 1877, the latter body being formed with the objective of influencing tariff policy and factory legislation, as well as resisting the eight hour day agitation. These two bodies were followed within a few years by the Victorian Employers' Union, which later changed its name to become the Victorian Employers' Federation.

A great stimulus to the growth of employers' associations in Victoria followed the establishment of the Wages Board system (see pages 164-5), particularly during the first two decades of the present century. Associations of Master Wheelwrights and Blacksmiths, Master Drapers, Master Hairdressers, and Master Grocers all followed closely upon the establishment

of Wages Boards in their respective trades. Employers had to unite in order to nominate their representatives on the Boards. Since it became permissible in 1934 for paid officials to represent employers, many associations have nominated officers of the Chamber of Manufactures or of the Victorian Employers' Federation to represent them on the State Wages Boards.

Employers' associations in Victoria at the present time may be divided into three groups. One group is constituted by the Victorian Chamber of Manufactures, together with a small number of affiliated associations. The Chamber has 6,750 individual members organised into about 200 industry sections or sub-sections. The Chamber is incorporated as a company limited by guarantee and is administered by a council of 30 members, an executive committee, elected office bearers, and a salaried director. The Chamber's secretariat acts for the various sections before both State and Commonwealth industrial authorities. In addition to industrial matters, the Chamber has always taken an active part in proceedings before the Tariff Board. It also operates an insurance company and a wide variety of advisory commercial services for its members.

A second group is constituted by 80 or so associations that are affiliated directly or indirectly to form the Victorian Employers' Federation. In addition, about 2,000 firms are individual members of the Federation. Most of the member associations operate in the building, distributive, or service industries, as distinct from but not excluding manufacturing industries. Several primary producers' unions are also affiliated with the Federation. Some of the affiliated associations are themselves federations of smaller and more specialised bodies. The Employers' Federation is an incorporated body registered with the Commonwealth Arbitration Commission, with a council of 120 members, an executive committee, six elected office bearers (who constitute its Board of Governors) and a salaried secretary. The Federation provides secretarial services for about 25 of its member associations or institutes and undertakes industrial services for many others. Unlike the Chamber of Manufactures, it is not involved in tariff matters, but it has been active in organising training courses particularly in business administration at supervisor level, in providing advisory services on financial matters to small businesses, in providing assistance in recruitment, selection, and placement, language courses, surveys, wages, salaries, and fringe benefits, and in addition sponsoring various community services. It also operates a subsidiary insurance company for the benefit of the members of its affiliated associations.

Third, there is an indeterminate number of miscellaneous employers' associations that are not affiliated with either the Chamber or the Federation. Examples are the Victorian Showmen's Guild and the Electrical Contractors' Federation. In the case of some associations at least, the absence of affiliation with either the Victorian Employers' Federation or the Chamber of Manufactures is explained by the fact that they have ties with corresponding associations in other States. A few are actually branches of Australia-wide associations. It is probable that those associations which have interstate affiliations are mainly concerned with the Commonwealth industrial jurisdiction, rather than with the Victorian Wages Boards. Moreover, most of them must rely on their Federal secretariats to represent them before the Commonwealth tribunals, since very few specifically Victorian

associations are registered for this purpose. Apart from the Chamber of Manufactures, the Victorian Employers' Federation, and the Automobile Chamber of Commerce, only some five or six Victorian employers' associations are registered with the Commonwealth Arbitration Commission.

Finally, it may be noted that unlike the trade union movement, employers' associations lack any central representative organisation. This is so in the Federal as well as in the State sphere. The Victorian Employers' Federation, the Chamber of Manufactures, and many individual associations are affiliated with corresponding bodies in other States, but their Federal organisations remain formally independent of one another, although they may in practice co-operate on particular issues.

Control of labour conditions

Department of Labour and Industry

The State Department of Labour and Industry deals generally with the registration and inspection of factories and shops, boilers and pressure vessels, and lifts and cranes. Wages Boards and the Apprenticeship Commission are statutory bodies placed within the Department for purposes of administration. The *Labour and Industry Act* 1953 revised and consolidated the earlier Factories and Shops Acts and was consolidated in 1958. Included in the present functions of the Department are the following :

1. Inspection and enforcement of conditions of labour generally, including wages, hours of work, rest periods, holidays, annual leave, and long service leave.
2. Employment of women, children, and young persons including the training, oversight of schooling, and supervision of apprentices.
3. Industrial relations, including the prevention and settlement of industrial disputes and advice on industrial matters.
4. Industrial safety, health, and welfare, including the training of workers in safe practices, control of dangerous methods and materials, guarding of machinery, prevention of accidents, and the control and regulation of industrial aspects of noxious trades.
5. Initiation and direction of research and the collection, preparation, and dissemination of information and statistics on matters within Departmental jurisdiction.
6. Consumer protection, including measures to achieve truthful description of goods (generally), correct labelling, branding or stamping of textiles, leather goods, footwear and furniture, and measures to prevent false or misleading advertising, deceitful sales practices, and other methods of selling or providing services which place the consumer at a disadvantage.

Labour legislation

The earliest attempt at regulating the conditions of labour in Victoria was made by the passing of an Act dated 11 November 1873, forbidding the employment of any female in a factory for more than eight hours in any day. This Act defined "factory" to be a place where not fewer than ten persons were working. Since 1873 the definition of "factory" has been broadened until now it includes any place in which mechanical power exceeding one

half horsepower is in use or in which two or more persons are engaged in any manufacturing process. In some circumstances, one or more persons constitute a factory even where no mechanical power is used. The general recognition of the necessity of securing the health, comfort, and safety of the workers has been expressed in many further legislative enactments.

The industrial legislation which was formerly included in the Factories and Shops Acts has now been consolidated in the *Labour and Industry Act 1958*.

Closing hours of shops

Trading hours for shops are fixed by the *Labour and Industry Act 1958* and by regulations made under that Act. The Act was amended by the *Labour and Industry (Shop Trading Hours) Act 1971*, which came into operation on 23 November 1971, and the general hours for trading are now not restricted except on public holidays and between 1 p.m. on Saturday and midnight Sunday when most classes of shops must be closed. The Act also contains specific restrictions on the trading hours of butchers' shops, petrol shops on Christmas Day and Anzac Day and on certain chemists' shops.

Shops listed in the Fifth Schedule to the Act, the trading hours of which are not restricted, include bread, pastry and confectionery, cooked meat, fish, flower, fruit and vegetable, aviary and cage birds, and booksellers' and newsagents' shops, and may sell certain goods detailed in the Sixth Schedule at any time.

Following the passing of the *Labour and Industry (Shop Trading Hours) Act 1971*, the Food Shops Wages Board, the General Shops Wages Board, the Electrical, Furniture and Hardware Shops Wages Board, and the Clothing and Footwear Shops Wages Board included new provisions in their Determinations to prohibit the employment of persons (other than casuals) after 6 p.m. Monday to Thursday and after 9 p.m. on Friday. An appeal against the Determination of the Food Shops Board was subsequently upheld by the Industrial Appeals Court on the grounds that the Board did not have the power to include such a provision and it was removed from that Determination.

The council of a municipality whose area is outside a radius of 20 miles from the G.P.O. Melbourne may apply to the Minister of Labour and Industry for exemption from shop trading hours for shops in an area which is for the time being wholly or partly a holiday resort. The Minister is to refer such application to the Minister of Tourism for a report as to (a) whether the area is a holiday resort for the period of the application and (b) whether the holiday population is large by comparison with the resident population. The Minister may, after having considered the report, subject to such terms as he thinks fit, exempt any shopkeeper in the area from the observance of shop trading hours for a period not exceeding fifteen weeks. The Minister may also exempt any shopkeeper from the specified closing hours in a municipal district where a large work force is temporarily employed and where the hours of work do not permit shopping within the ordinary trading hours. On application by a municipal council, and after consultation with the Minister of Tourism, the Minister may exempt shopkeepers in tourist resorts selling goods which are attractive to tourists from observance of the normal shop trading hours.

Consumer protection

The *Consumer Protection Act* 1970, which came into operation on 16 November 1970, provides for the establishment of a Consumer Affairs Council and a Consumer Protection Bureau, the functions of which may be summarised as follows :

The Consumer Affairs Council investigates any matter affecting the interests of consumers referred to it by the Minister ; makes recommendations with respect to any matter calculated to protect the interests of consumers ; consults with manufacturers, retailers, and advertisers in relation to any matter affecting the interests of consumers ; and in respect of matters affecting the interests of consumers, disseminates information and encourages and undertakes educational work.

The Consumer Protection Bureau advises members of the public on the provisions of the consumer protection legislation administered in the Department of Labour and Industry (and takes action to remedy infringements of those provisions) ; advises people on other matters which affect their interests as consumers ; receives complaints of illegal or unfair practices in relation to goods or services and, where appropriate, refers these complaints to the government department or other statutory body best able to act or advise on them ; and conducts research and gathers information on matters affecting the interests of consumers.

Consumers' complaints investigated by officers of the Department have been concerned with the servicing of electrical appliances, door to door sales practices, motor car sales and repairs, "inertia" selling, false advertising, and other alleged improper practices by sellers of goods or services. During 1970, 1,665 complaints were received and, in many cases, redress was obtained for the complainant.

Apprenticeship Commission

Victoria's official system of apprenticeship training began with the passing of the *Apprenticeship Act* 1927. This Act established the Apprenticeship Commission of Victoria, which, since it first met in 1928, has been the guiding influence in promoting and supervising apprenticeship in skilled trades in Victoria.

The original legislation of 1927 has been amended and replaced from time to time. The principal Act now in force (No. 6199) is that resulting from a consolidation of Statutes in 1958. This legislation forms the basis of Victoria's apprenticeship system today and is designed to utilise the knowledge, ability, and experience of representatives of employers and employees, together with the State Government, in supervising the training of indentured apprentices, and co-ordinating technical schools and industry for the purpose of supplementing the training received in employers' workshops.

Under an amending Act passed in 1969 membership of the Apprenticeship Commission was increased to ten members comprising a full-time president, appointed on the recommendation of the Minister of Labour and Industry, a deputy president, who is an officer of the Education Department nominated by the Minister of Education, four representatives of employers, and four representatives of employees.

The Commission is assisted in its functions by trade committees which are appointed under the Act for a trade or group of trades. Trade committees provide specialist advice and make recommendations to the Commission on matters pertaining to the trades for which they are appointed. At 30 June 1971 there were 41 trade committees functioning in respect of 143 apprenticeship trades in which nearly 30,000 apprentices were employed.

The Apprenticeship Act also provides for the appointment of advisory committees to assist the Commission in its work in country areas. Nineteen such committees are operating at present.

The authority of the Apprenticeship Commission is restricted, by the Apprenticeship Act, to trades which have been proclaimed apprenticeship trades by the Governor in Council. Since 1927 all major trades have been so proclaimed. The Commission maintains a very close liaison with the Education Department in order that the latter may provide appropriate technical school facilities for indentured apprentices who are directed to attend classes or undertake correspondence courses by the Commission.

Until recently "day release" training was the only form of schooling available to an apprentice. However, since 1964 the Commission has examined and in some cases implemented a system of "block release" training whereby an apprentice obtains his schooling in fortnightly periods instead of attending on specified days or evenings in each week. This system has particular advantages for apprentices in outlying country areas who find it difficult or impossible to attend classes under the "day release" system. These apprentices are brought to "block release" classes in Melbourne or Geelong and the Government subsidises their accommodation and provides free rail travel. The cost of these payments in 1970-71 was \$48,671.

The welfare and training of apprentices in employers' workshops is also supervised by the Commission, which, through its field officers, investigates complaints and carries out routine inspections of the training methods and facilities provided for apprentices by their employers.

The period of apprenticeship for each trade is determined by the Governor in Council on the recommendation of the Commission. It varies from trade to trade depending upon the scope of learning required by the skills of the various trades. On 1 October 1970 the prescribed term in a number of trades was reduced to four years, and this became the maximum period any entrant to a proclaimed trade is required to serve. In some trades, credits for higher educational standards at entry are provided, thus reducing the term to less than four years. The first three months of employment are called the probationary period. This period enables the apprentice and employer to assess whether each will be satisfied in the coming years of employment. At or towards the end of the probationary period the Commission prepares indentures free of cost.

The proclaimed apprenticeship trades and the number of probationers and apprentices employed under the Act on 30 June in each of the years 1967 to 1971 are shown in the following table. These figures are extracted from the Annual Reports of the Apprenticeship Commission.

VICTORIA—NUMBER OF PROBATIONERS AND APPRENTICES EMPLOYED

Trade	1967	1968	1969	1970	1971
Building trades—					
Plumbing and gasfitting	2,151	2,368	2,400	2,413	2,447
Carpentry and joinery	2,923	3,009	3,085	3,059	3,078
Painting, decorating, and signwriting	459	445	474	396	450
Plastering	56	56	73	43	32
Fibrous plastering	217	225	204	208	153
Bricklaying	196	208	238	199	195
Tile laying	3	12	19	28	29
Stonemasonry	..	..	1	1	6
Total building trades	6,005	6,323	6,494	6,347	6,390
Metal trades—					
Engineering	4,659	4,454	4,606	4,378	4,439
Electrical	2,983	3,184	3,468	3,371	3,561
Motor mechanic	3,655	3,825	3,857	3,699	3,765
Moulding	122	109	115	113	134
Boilermaking and/or steel construction	801	834	954	1,104	1,126
Sheet metal	437	456	482	513	558
Electroplating	28	37	38	38	47
Aircraft mechanic	201	205	193	162	147
Radio tradesman	313	331	339	332	343
Instrument making and repairing	181	197	200	183	191
Silverware and silverplating	14	14	13	15	12
Vehicle industry	1,525	1,567	1,643	1,671	1,779
Refrigeration mechanic	135	145	179	184	203
Optical tradesmen	..	29	63	80	92
Total metal trades	15,054	15,387	16,150	15,843	16,397
Food trades—					
Breadmaking and baking	114	156	144	152	160
Pastrycooking	137	143	179	158	165
Butchering and/or small goods making	691	732	693	829	757
Cooking	172	207	263	275	307
Waiting	..	..	7	11	13
Total food trades	1,114	1,238	1,286	1,425	1,402
Miscellaneous—					
Bootmaking	263	221	173	172	162
Printing	1,765	1,774	1,792	1,719	1,691
Hairdressing	2,204	2,447	2,570	2,275	2,160
Dental mechanic	59	59	69	63	70
Watchmaking	44	48	53	51	51
Furniture	798	886	956	933	894
Glass	47	54	63	72	77
Gardening	2	28	77	91	116
Textile mechanic	..	..	..	11	20
Shipwrighting and boatbuilding	..	..	..	5	31
Dry cleaning	..	..	..	..	2
Total miscellaneous	5,182	5,517	5,753	5,392	5,274
Total	27,355	28,465	29,683	29,007	29,463

EMPLOYMENT AND UNEMPLOYMENT

Control of employment

Commonwealth Department of Labour and National Service

At the Commonwealth level some of the more important of the functions of the Department of Labour and National Service are the operation of the Commonwealth Employment Service; the administration of the *National Service Act* 1951-1968 and the reinstatement of National Servicemen in civil employment under the provisions of the *Defence (Re-establishment) Act* 1965-1968; the formulation of industrial relations policy; conciliation and arbitration in relation to industrial disputes, with special responsibilities for the coal, stevedoring, and maritime industries; analysis, interpretation, and provision of information on the labour market and changes in employment; and the provision of assistance and advice to industry with regard to training, safety, physical working conditions, personnel practices, and food services.

Commonwealth Employment Service

The Commonwealth Employment Service (C.E.S.) was established under section 47 of the *Re-establishment and Employment Act* 1945-1966. The principal functions of the service are to assist people seeking employment to obtain positions best suited to their training, experience, abilities, and qualifications; and to assist employers seeking labour to obtain employees best suited to their needs.

The C.E.S. functions within the Employment and Industrial Services Division of the Department on a decentralised basis. At the State level the C.E.S. and the other elements of the Department are under the control of a Regional Director responsible to the permanent head of the Department. In Victoria the Regional Office Headquarters are located in Melbourne and there are twenty-three District Employment Offices in the metropolitan area and sixteen in country centres. In addition there are a number of agencies in smaller country centres which work in conjunction with the District Employment Office responsible for the area in which they are located.

Specialist facilities are provided by the C.E.S. for young people, persons with physical and mental handicaps, older workers, ex-members of the defence forces, migrants, rural workers, and persons with professional and technical qualifications. Vocational guidance is provided free of charge by a staff of qualified psychologists. It is available to any person, but is provided particularly for young people, ex-servicemen, and handicapped persons.

The C.E.S. assists in the administration of the unemployment and sickness benefits provisions of the *Social Services Act* 1947-1970. All applicants for unemployment benefit must register at a District Employment Office or agency, which is responsible for certifying whether or not suitable employment can be offered to them.

The C.E.S. is responsible for placing in initial employment all Commonwealth nominated migrant workers coming to Australia under the assisted passage schemes from Great Britain and other countries, and, as required, it provides assistance to other migrants wishing to obtain employment. When migrants coming under Commonwealth nomination arrive in Australia, the C.E.S. arranges for them to move to their initial employment and for their admission, if necessary, to Commonwealth controlled hostels.

Since 1951 the C.E.S. has been responsible for recruiting Australian experts for overseas assignments under the Colombo Plan, the United Nations Development Programme, and other technical assistance schemes. The principal spheres in which experts have been supplied are agriculture, education, engineering, geology, health, and economic and scientific research and development. The C.E.S. also arranges training in industry for students who come to Australia for training under the various technical assistance schemes with which the Commonwealth is associated.

In association with its placement activities, the C.E.S. carries out regular surveys of the labour market in all areas and industries and supplies detailed information to interested Commonwealth and State Government departments and instrumentalities and to the public. It also advises employers, employees, and others on labour availability and employment opportunities in various occupations and areas and on other matters concerning employment.

No charge is made for any of the services rendered by the C.E.S.

Particulars of the major activities of the C.E.S. during the five years ended 30 June 1971 are given in the following table :

VICTORIA—COMMONWEALTH EMPLOYMENT SERVICE

Particulars	1966-67	1967-68	1968-69	1969-70	1970-71
Applications for employment (a)	251,065	271,994	261,537	264,476	291,064
Number placed in employment	101,611	108,748	116,477	121,803	121,982
Number of vacancies notified	156,488	154,682	165,493	179,517	175,677
Vacancies at 30 June	11,459	9,411	11,777	12,326	9,228

(a) Includes unemployed persons and persons already in employment who are seeking improved positions.

Work force

At the 1961 and previous Censuses the work force was determined as : "Those who are engaged in an industry, business, profession, trade or service at the time of the Census (including those on long service leave, etc.) . . ."; and ". . . those out of a job at time of the Census but who are usually engaged in an industry, business, profession, trade or service"

At the 1966 Census additional questions were asked in order to obtain information on the basis of which the work force could be determined more precisely.

The work force now includes all persons who did any paid work for an employer or who had a job as an employee from which they were temporarily absent or who were looking for work. Persons helping but not receiving wages or a salary who usually worked less than 15 hours a week were excluded from the work force.

The net effect of the new definition was to include approximately 33,000 additional persons in the Victorian work force, i.e., a proportionate increase in the Victorian work force of approximately 2.5 per cent. The major factor in this change was females working part-time (sometimes for only a few hours a week) some of whom, in 1961, did not consider themselves as ". . . engaged in an industry, business, profession, trade or service".

Occupational status

The occupational status of persons classified as in the work force at population census date covers two broad groups : those employed and those

unemployed. The first group includes employers, self-employed persons, employees, and helpers working more than 15 hours a week.

Industry

Persons in the work force were asked to state industry in accordance with the following instructions :

State the exact branch of industry, business or service in which mainly engaged last week, using two or more words where possible. For example, 'Dairy Farming', 'Coal Mining', 'Woollen Mills', 'Retail Grocery', 'Road Construction', etc. Employees should state the industry of their employer. For example, a carpenter employed by a coal mining company should state 'Coal Mining'. If employed by a Government Department or other public body, state also its name. For paid housekeepers and domestic servants in private households, write 'P.H.'

VICTORIA—MALES AND FEMALES IN THE WORK FORCE CLASSIFIED ACCORDING TO OCCUPATIONAL STATUS IN CONJUNCTION WITH AGE : CENSUS, 30 JUNE 1966

Age last birthday (years)	Employed					Unem- ployed	Total in work force
	Employer	Self- employed	Employee (on wage or salary)	Helper (not on wage or salary)	Total		
MALES							
15-19	295	1,339	83,896	1,440	86,970	1,931	88,901
20-24	1,813	5,116	103,211	521	110,661	1,470	112,131
25-29	4,950	8,500	90,236	213	103,899	996	104,895
30-34	7,084	9,860	80,423	115	97,482	835	98,317
35-39	9,433	12,023	87,630	105	109,191	847	110,038
40-44	10,285	11,911	85,092	99	107,387	825	108,212
45-49	9,445	10,511	70,165	88	90,209	778	90,987
50-54	8,656	9,952	65,344	100	84,052	716	84,768
55-59	6,716	8,807	54,085	127	69,735	732	70,467
60-64	4,337	6,728	38,397	155	49,617	640	50,257
65 and over	4,222	7,555	18,738	370	30,885	369	31,254
Total in work force	67,236	92,302	777,217	3,333	940,088	10,139	950,227
FEMALES							
15-19	122	300	81,802	626	82,850	2,223	85,073
20-24	699	1,020	69,849	585	72,153	1,336	73,489
25-29	1,205	1,686	34,010	693	37,594	707	38,301
30-34	1,716	2,108	27,801	769	32,394	609	33,003
35-39	2,428	2,571	34,186	936	40,121	613	40,734
40-44	2,807	2,622	37,483	1,079	43,991	543	44,534
45-49	2,495	2,577	30,969	994	37,035	416	37,451
50-54	2,078	2,397	25,880	877	31,232	343	31,575
55-59	1,454	1,835	17,844	623	21,756	255	22,011
60-64	784	1,265	9,029	448	11,526	116	11,642
65 and over	959	1,627	5,772	561	8,919	89	9,008
Total in work force	16,747	20,008	374,625	8,191	419,571	7,250	426,821

VICTORIA—MALES AND FEMALES IN THE WORK FORCE CLASSIFIED
ACCORDING TO INDUSTRY IN CONJUNCTION WITH OCCUPATIONAL
STATUS: CENSUS, 30 JUNE 1966

Industry	Employed					Un- employed	Total in the work force
	Em- ployer	Self- employed	Em- ployee (on wage or salary)	Helper (not on wage or salary)	Total		

MALES							
Primary production	17,115	45,758	27,174	2,267	92,314	477	92,791
Mining and quarrying	94	92	4,574	2	4,762	37	4,799
Manufacturing	7,974	6,066	295,682	179	309,901	1,779	311,680
Electricity, gas, water and sanitary services (pro- duction, supply and maintenance)	95	87	31,142	20	31,344	72	31,416
Building and construction	9,923	12,038	81,583	96	103,640	1,143	104,783
Transport and storage	2,907	7,853	51,612	42	62,414	428	62,842
Communication	..	2	23,180	12	23,194	68	23,262
Finance and property	1,221	1,627	27,285	22	30,155	64	30,219
Commerce	16,244	10,845	106,991	253	134,333	806	135,139
Public authority (n.e.i.) and defence services	..	..	41,890	..	41,890	74	41,964
Community and business services (including pro- fessional)	6,011	2,462	56,256	191	64,920	167	65,087
Amusement, hotels and other accommodation, cafes, personal service, etc.	5,483	5,156	23,284	157	34,080	364	34,444
Other industries	4	7	16	..	27	1	28
Industry inadequately described or not stated	165	309	6,548	92	7,114	4,659	11,773
Total in the work force	67,236	92,302	777,217	3,333	940,088	10,139	950,227

FEMALES							
Primary production	2,826	6,341	5,678	4,261	19,106	73	19,179
Mining and quarrying	9	8	380	2	399	1	400
Manufacturing	1,800	1,640	122,079	361	125,880	930	126,810
Electricity, gas, water and sanitary services (pro- duction, supply and maintenance)	12	3	2,361	4	2,380	3	2,383
Building and construction	635	277	2,980	183	4,075	18	4,093
Transport and storage	321	288	5,745	111	6,465	36	6,501
Communication	..	2	6,523	12	6,537	39	6,576
Finance and property	126	250	20,022	47	20,445	75	20,520
Commerce	6,062	5,376	68,248	1,170	80,856	496	81,352
Public authority (n.e.i.) and defence services	..	..	11,214	2	11,216	38	11,254
Community and business services (including pro- fessional)	841	1,640	84,917	427	87,825	497	88,322
Amusement, hotels, and other accommodation, cafes, personal service, etc.	3,993	3,871	36,953	819	45,636	441	46,077
Other industries	..	1	6	..	7	1	8
Industry inadequately described or not stated	122	311	7,519	792	8,744	4,602	13,346
Total in the work force	16,747	20,008	374,625	8,191	419,571	7,250	426,821

From the answers to this question persons were classified according to the Bureau's "Classification of Industries" which provides for each person to be classified according to the nature of the business in which the person is mainly engaged, regardless of whether operated by a government authority, corporation, or individual.

The precise classification of persons in the work force according to industry is extremely difficult but is subject to continuing efforts to improve the quality of the data from census to census. Consequently the comparison of data compiled at the 1966 Census with that obtained at previous censuses is not only influenced by changes in the definition and content of the work force, but by the different responses which may have been evoked by efforts to improve the questions on the census schedule, and by some changes in coding rules designed to rectify known deficiencies in the data. Classification is difficult mainly because of the problem of conveying through a printed form the exact nature of the information required (e.g., the conceptual difference between "occupation" and "industry") and the consequential inadequacy of many replies.

Further information on the 1966 Census is given in Part 3 of this *Year Book*. Information on the 1961 Census will be found on pages 208-9 of the *Victorian Year Book 1967*.

Wage and salary earners in civilian employment

Estimates of wage and salary earners in civilian employment are based on comprehensive data (referred to here as "benchmarks") derived for the purpose from the Population Census of June 1966. For the period from July 1966 to June 1971 the figures are estimates designed to measure changes in the sector of employment to which the benchmarks relate.

Between population censuses the employment data are obtained from three main sources, namely, (a) current pay-roll tax returns; (b) current returns from government bodies; and (c) some other current returns of employment (e.g., for hospitals); the balance, i.e., unrecorded private employment, is estimated. At June 1966 recorded employment obtained from the foregoing sources accounted for about 85 per cent of the total number of employees in the industries covered, as determined by the census.

The figures in the following tables relate only to civilian wage and salary earners, not the total labour force. They therefore exclude employers, self-employed persons, unpaid helpers, and defence forces. Also excluded, because of the inadequacy of current data, are employees in agriculture and in private domestic service.

The concepts and definitions adopted at the 1966 Census from which the benchmarks for this series were derived conformed closely to the recommendations of the Eighth International Conference of Labour Statisticians.

Current data supplied by reporting enterprises or establishments generally refer to persons of the pay-roll for the last pay period in each month. Persons who are on paid leave or who work during part of the pay period and are unemployed or on strike during the rest of the period are generally counted as employed. Those not shown on employers' pay-rolls because they are on leave without pay, on strike, or stood down for the entire period are excluded.

Pay-roll tax returns are lodged at present by all employers paying more than \$400 a week in wages. In September 1971 the collection of pay-roll

tax was transferred from the Commonwealth to the individual States. Conditions and payments are governed by the relevant State Acts.

Particulars of employment obtained from other collections, such as the integrated economic censuses of manufacturing, mining, retail and wholesale trade, are used to check and, where desirable, to revise estimates. Some figures are subject to further revision as the results of later censuses and surveys become available.

Although the series measure reasonably well the short-term trends in employment in the defined field, they may be less reliable for longer-term measurement. There are conceptual differences between benchmark and pay-roll data, and changes in such factors as labour turnover, multiple jobholding, and part-time working all affect the trend over longer periods.

The following table shows, for Victoria, the estimated number of wage and salary earners in civilian employment (excluding employees in agriculture and private domestic service) in the principal industry groups at June of each of the years 1966 and 1968 to 1971. The number of employees of government bodies and private employers is also shown.

VICTORIA—WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT:
INDUSTRY GROUPS (a)
(‘000)

Industry group	June 1966	June 1968	June 1969	June 1970	June 1971
MALES					
Mining and quarrying	4.7	4.3	4.1	4.5	4.6
Manufacturing	300.9	307.2	316.0	323.9	325.6
Electricity, gas, water, and sanitary services	31.4	31.9	31.6	31.3	31.2
Building and construction	81.7	83.9	84.5	82.9	81.0
Road transport and storage	21.0	22.0	22.7	23.6	24.7
Shipping and stevedoring	8.9	9.3	9.4	9.7	9.7
Rail and air transport	19.1	19.2	19.3	19.7	20.4
Communication	23.3	24.7	24.8	25.4	26.2
Finance and property	27.8	30.5	32.3	34.0	36.0
Retail trade	53.9	56.0	56.8	58.0	58.8
Wholesale and other commerce	53.9	54.6	55.8	57.2	58.3
Public authority activities (n.e.i.)	27.7	30.3	31.0	32.2	33.0
Health, hospitals, etc.	10.4	11.0	11.5	11.9	12.4
Education	23.9	26.6	28.3	29.7	31.6
Amusement, hotels, personal service, etc. (b)	21.7	24.1	25.8	27.4	29.1
Other (c)	25.4	27.9	28.2	29.5	30.2
Total	735.7	763.5	782.2	801.0	812.7
Private	541.0	560.1	579.2	595.1	604.4
Government (d)	194.7	203.4	203.0	205.9	208.3
Total	735.7	763.5	782.2	801.0	812.7

(a) Excludes employees in agriculture and private domestic service, and defence forces.

(b) Includes restaurants and hairdressing.

(c) Includes forestry, fishing and trapping; law, order, and public safety; religion and social welfare; and other community and business services.

(d) Includes employees of Commonwealth, State, semi-government, and local government bodies.

VICTORIA—WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT:
INDUSTRY GROUPS (a)—continued
(‘000)

Industry group	June 1966	June 1968	June 1969	June 1970	June 1971
FEMALES					
Mining and quarrying	0.4	0.5	0.5	0.6	0.7
Manufacturing	123.1	129.1	134.2	138.6	138.8
Electricity, gas, water, and sanitary services	2.4	2.4	2.6	2.7	2.7
Building and construction	3.1	3.5	3.7	3.9	4.0
Road transport and storage	2.8	2.8	2.9	3.1	3.2
Shipping and stevedoring	0.6	0.6	0.6	0.7	0.7
Rail and air transport	2.6	2.7	2.7	2.8	2.9
Communication	6.6	7.0	7.2	7.4	7.7
Finance and property	20.4	22.3	23.7	25.5	26.5
Retail trade	51.0	55.6	57.5	59.6	60.3
Wholesale and other commerce	20.9	21.4	22.0	23.1	24.1
Public authority activities (n.e.i.)	11.1	12.4	13.1	14.0	14.1
Health, hospitals, etc.	37.9	40.1	41.7	44.2	47.4
Education	30.6	35.0	38.3	40.7	43.5
Amusement, hotels, personal service, etc. (b)	29.1	32.8	33.8	36.2	39.2
Other (c)	18.6	20.2	21.4	23.0	24.1
Total	361.2	388.2	405.8	426.1	440.0
Private	304.6	327.5	341.1	357.6	368.9
Government (d)	56.6	60.7	64.7	68.5	71.1
Total	361.2	388.2	405.8	426.1	440.0
PERSONS					
Mining and quarrying	5.1	4.8	4.6	5.1	5.3
Manufacturing	424.0	436.3	450.2	462.5	464.4
Electricity, gas, water, and sanitary services	33.8	34.3	34.2	34.0	33.9
Building and construction	84.8	87.4	88.2	86.9	85.0
Road transport and storage	23.8	24.8	25.6	26.7	27.9
Shipping and stevedoring	9.5	9.9	10.0	10.4	10.4
Rail and air transport	21.7	21.9	22.0	22.5	23.3
Communication	29.9	31.7	32.0	32.8	33.9
Finance and property	48.2	52.8	56.0	59.5	62.5
Retail trade	104.9	111.6	114.3	117.6	119.1
Wholesale and other commerce	74.8	76.0	77.8	80.3	82.4
Public authority activities (n.e.i.)	38.8	42.7	44.1	46.2	47.1
Health, hospitals, etc.	48.3	51.1	53.2	56.1	59.8
Education	54.5	61.6	66.6	70.4	75.1
Amusement, hotels, personal service, etc. (b)	50.8	56.9	59.6	63.6	68.3
Other (c)	44.0	48.1	49.6	52.5	54.3
Total	1,096.9	1,151.7	1,188.0	1,227.1	1,252.7
Private	845.6	887.6	920.3	952.7	973.3
Government (d)	251.3	264.1	267.7	274.4	279.4
Total	1,096.9	1,151.7	1,188.0	1,227.1	1,252.7

(a) Excludes employees in agriculture and private domestic service, and defence forces.

(b) Includes restaurants and hairdressing.

(c) Includes forestry, fishing and trapping; law, order, and public safety; religion and social welfare; and other community and business services.

(d) Includes employees of Commonwealth, State, semi-government, and local government bodies.

Government bodies

The following table includes employees, within Victoria, of government bodies on services such as railways, tramways, banks, post office, air transport, education (including universities), broadcasting, television, police, public works, factories and munitions establishments, departmental hospitals and institutions, migrant hostels, etc., as well as administrative employees :

VICTORIA—WAGE AND SALARY EARNERS IN CIVILIAN EMPLOYMENT:
GOVERNMENT BODIES
(’000)

At end of June—	Commonwealth Government			State and semi-government			Local government			Total government		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1966	61.0	18.7	79.6	117.6	35.3	152.9	16.1	2.7	18.8	194.7	56.6	251.3
1968	64.4	19.9	84.3	121.2	37.8	159.0	17.8	3.0	20.8	203.4	60.7	264.1
1969	65.5	20.8	86.3	121.1	40.7	161.8	16.5	3.2	19.6	203.0	64.7	267.7
1970	67.4	21.9	89.4	121.6	43.2	164.9	16.8	3.4	20.2	205.9	68.5	274.4
1971	69.0	22.3	91.3	122.8	45.3	168.1	16.6	3.5	20.1	208.3	71.1	279.4

Further references. Further details on subjects dealt with in this part are contained in other publications of the Commonwealth Bureau of Census and Statistics. Detailed information on employment and unemployment is contained in the monthly mimeographed bulletin *Employment and Unemployment*. Current information is also available in the *Monthly Review of Business Statistics* and the *Victorian Monthly Statistical Review*, and preliminary estimates of civilian employment are issued in a monthly statement *Employed Wage and Salary Earners*. In addition, wages information is published monthly in the bulletin *Wage Rates and Earnings*. Seasonally adjusted series of employment and unemployment statistics are also available.

PRICES

Retail price indexes

A retail price index is designed to measure the change over time in the level of retail prices in a selected field. The basic principle of an index is to select a list of commodities and services which are representative of the field to be covered, and to combine the prices of these commodities and services at regular intervals by the use of “weights” which represent the relative importance of the items in that field.

Five series of retail price indexes have been compiled for Australia by the Commonwealth Statistician at various times before the current Consumer Price Index was introduced in 1960.

Information about retail price indexes in general and retail price indexes compiled by the Commonwealth Statistician before 1960 is set out on pages 510-3 of the *Victorian Year Book* 1964.

Consumer Price Index

The Consumer Price Index is a quarterly measure of variations in retail prices of goods and services representing a high proportion of the expenditure of wage earners’ households.

The Consumer Price Index covers a wide range of commodities and services arranged in the following five major groups: food, clothing and

drapery, housing, household supplies and equipment, and miscellaneous. These groups do not include every item of household spending. It is both impracticable and unnecessary for them to do so. However, substantial changes in the pattern of expenditure of wage earner households have occurred since the Index was first introduced and this has made it necessary to construct indexes with additional items and changes in the weighting patterns at intervals. These indexes are "linked" to form a "chain" of fixed weight aggregative indexes which is called the Consumer Price Index. Under this method average percentage price movements are assessed on one pattern up to the time of the link and on another pattern thereafter.

Linking ensures that the series reflects only price variations and not differences in cost of old and new combinations and lists of items. The introduction of new items and weights by linking does not of itself affect the level of the Index.

Significant changes in composition and weighting have been effected at the links of June quarter 1952, June quarter 1956, March quarter 1960, December quarter 1963, and December quarter 1968. Details of the principal changes made at these points of time are shown in the *Victorian Year Books* 1964, 1968, and 1970.

The sets of weights used for the different periods covered by the Index have been derived from the analysis of statistics of production and consumption, censuses of population and retail establishments, the continuing Survey of Retail Establishments, from information supplied by manufacturing, commercial and other relevant sources, and from special surveys.

Until the December quarter 1968 the Index had been compiled for each quarter from the September quarter 1948 and each financial year from 1948-49, the reference base year being 1952-53 = 100.0. As from the March quarter 1969 the reference base year has been changed to that of 1966-67 = 100.0, index numbers for past periods having been re-calculated on the new base year. Apart from slight rounding differences, index numbers for past periods have exactly the same percentage movement on either reference base. The Index table is shown below.

"All groups" index numbers, and group index numbers for each of the five major groups are compiled and published regularly for the six State capital cities separately and combined and for Canberra. The separate city indexes measure price movements within each city individually. They enable comparisons to be drawn between cities about differences in degree of price

MELBOURNE—CONSUMER PRICE INDEX

(Base of each index : Year 1966-67 = 100.0)

Year	Food	Clothing and drapery	Housing	Household supplies and equipment	Miscellaneous	All groups
1961-62	90.7	94.6	85.6	94.9	84.7	89.8
1962-63	89.4	94.9	87.6	94.8	84.9	89.7
1963-64	90.3	95.5	89.4	93.6	85.7	90.4
1964-65	95.1	96.9	92.0	95.8	90.6	94.0
1965-66	99.0	98.0	96.3	98.7	95.1	97.5
1966-67	100.0	100.0	100.0	100.0	100.0	100.0
1967-68	106.3	102.1	103.8	101.4	102.5	103.7
1968-69	107.3	104.2	107.9	102.9	107.3	106.2
1969-70	109.1	107.4	112.2	103.5	110.2	108.7
1970-71	112.7	111.5	117.8	105.8	115.8	113.1

movement, but not about differences in price level. Similarly, the separate group indexes measure price movement of each group individually. They enable comparisons to be drawn about differences in the degree of price change in the different groups, but do not show the comparative cost of the different groups.

Retail prices of food

The average retail prices of various food and grocery items in Melbourne are shown in the following table for each of the years 1948, 1958, and 1968 to 1970. Some minor changes of basis are incorporated in the figures for 1969 and 1970.

MELBOURNE—AVERAGE RETAIL PRICES OF SELECTED COMMODITIES (a)
(cents)

Item	Unit	1948	1958	1968	1969	1970
Groceries, etc.—						
Bread (delivered)	2 lb	5.8	13.3	19.0	20.0	21.0
Flour—Self raising	2 lb pkt	7.5	17.0	18.3	19.7	21.6
Tea(b)	$\frac{1}{2}$ lb	27.5	66.2	31.7	30.7	29.9
Sugar(c)	4 lb	3.7	8.3	42.4	42.2	42.3
Peaches, canned(d)	29 oz	14.4	36.1	28.9	29.9	31.5
Pears, canned(d)	29 oz	15.5	32.5	29.5	30.3	31.7
Potatoes	7 lb	10.3	26.3	57.8	35.4	45.4
Onions	lb	2.2	6.1	14.0	10.2	11.3
Dairy produce, etc.—						
Butter	lb	20.8	45.9	50.2	52.5	53.1
Eggs(e)	doz	27.9	55.4	65.0	68.9	61.8
Bacon rashers(f)	$\frac{1}{2}$ lb	24.6	67.1	51.5	51.3	52.7
Milk, fresh bottled(g)	quart	7.5	15.4	19.0	19.0	19.0
Meat—						
Beef, rib(h)	lb	11.0	35.9	61.9	63.0	65.3
„ steak, rump	lb	20.0	54.1	107.6	112.8	116.6
„ „ chuck	lb	9.3	28.8	51.9	52.4	52.7
„ sausages	lb	8.1	19.3	31.8	30.8	30.9
„ corned silverside	lb	12.2	35.9	63.1	64.0	65.0
„ „ brisket	lb	8.2	24.4	45.0	44.0	45.1
Mutton, leg	lb	10.8	21.6	28.8	28.3	27.8
„ chops, loin	lb	10.4	21.0	27.5	29.1	29.3
„ „ leg	lb	11.6	24.2	31.8	31.6	31.4
Pork, leg	lb	16.1	47.0	65.2	62.5	62.3
„ loin	lb	16.8	48.8	67.7	65.7	64.2
„ chops	lb	17.5	48.7	67.5	65.9	64.0

(a) In some cases the averages are price relatives.

(b) Prior to 1962, 1 lb.

(c) Prior to 1966, 1 lb.

(d) Prior to 1956, 30 oz tins.

(e) 24 oz from April 1961 to August 1965 extra large grade. Prior to 1961, new laid.

(f) Prior to 1965, 1 lb.

(g) Delivered. Milk prices prior to 1950 are for loose milk.

(h) Prior to 1955 prices are for "Bone-in".

Wholesale price indexes

Since 1928 the Commonwealth Statistician has compiled a wholesale price index known as the Wholesale Price (Basic Materials and Foodstuffs) Index. Through the years the validity of the weighting and the representativeness of the Index have become increasingly affected by changes in usage and in industrial structures. For this reason, and because of work on new

indexes of wholesale price movements, this index was last published for December 1970 although it is still available, in an abbreviated form, upon request to the Commonwealth Statistician. Two new indexes have now been published to cover the building sector. These are :

1. Materials Used in Building other than House Building ; and
2. Materials Used in House Building (see below).

Work is proceeding on the next area to be covered which will be material inputs to the manufacturing sector.

Wholesale Price Indexes of Materials Used in Building

The first of the two indexes in this series, "Materials Used in Building other than House Building", was introduced in April 1969, and the second, "Materials Used in House Building", in September 1970. Together they provide an up-to-date replacement for the Building Materials Group of the Wholesale Price (Basic Materials and Foodstuffs) Index. They are issued monthly.

Prices for use in these indexes are collected as at the mid-point of the month to which the Index refers, or as near thereto as practicable. They relate to specified standards of each commodity and are obtained in all State capital cities from the representative suppliers of materials used in building. There are some exceptions to the use of local prices in the indexes for each capital city.

Wholesale Price Index of Materials Used in Building other than House Building

This index measures changes in prices of selected materials used in the construction of buildings other than houses and "low-rise" flats (in general those up to three storeys). It includes seventy-two items, combined in eleven groups, in addition to an "all groups" index. Although the selected materials (or many of them) are also used in house (and low-rise flat) building, in building repair, maintenance and alteration work, and in "engineering construction" work (e.g., projects such as roads, dams, bridges, and the like), the weighting pattern of the Index, being designed for the specific purpose mentioned above, is not applicable to these other activities of the construction industry. In addition, since the weights are based on an average materials usage over a range of types of building within the defined area, the Index is not necessarily applicable to any specific building or type of building included in that area.

The Index is a fixed-weights index and is calculated by the method known as "the weighted arithmetic mean of price relatives". The items and weights were derived from reported values of materials used in selected representative buildings constructed in or about 1966-67. The single weighting pattern relates to the whole of Australia, and is applied (with minor exceptions) in calculating indexes for each State capital city.

Index numbers for each of the eleven groups and for "all groups" have been compiled for the six State capital cities, separately and combined, for each month from July 1966 and for the financial years from 1966-67. The reference base year for each index is 1966-67 = 100.0.

MELBOURNE—WHOLESALE PRICE INDEX OF MATERIALS USED IN
BUILDING OTHER THAN HOUSE BUILDING
(Base of each index : Year 1966-67 = 100.0)

Group	1967-68	1968-69	1969-70	1970-71
Concrete mix, cement, sand, etc.	99.9	101.1	104.4	111.9
Cement products	101.0	103.1	108.5	115.1
Bricks, stone, etc.	102.4	107.3	110.5	115.8
Timber, board and joinery	100.8	104.0	107.8	113.4
Steel and iron products	102.4	106.2	110.4	116.0
Aluminium products	100.9	104.0	108.7	117.1
Other metal products	105.8	106.7	124.1	120.8
Plumbing fixtures	102.4	103.4	111.8	121.6
Miscellaneous materials	102.8	104.3	106.4	110.2
Electrical installation materials	100.9	102.1	112.2	110.9
Mechanical services components	101.4	108.0	112.1	119.4
All groups	101.7	105.0	109.8	115.1

Wholesale Price Index of Materials Used in House Building

This index measures changes in prices of selected materials used in the construction of houses. Its composition is in accordance with the usage of materials in actual houses which were selected as representative for the purpose. The Index does not purport to represent buildings of any kind other than houses. The house building construction types included are those which use brick, brick veneer, timber, or asbestos cement sheeting as the principal material for the outer walls.

In the interests of uniformity and ease of use, the reference base of the index is the year 1966-67 = 100.0, the same as that used for the Wholesale Price Index of Materials Used in Building other than House Building. However, because of the later time at which the weighting source data were collected, the weighting base approximates more closely to the year 1968-69.

The Index is a fixed weights index and is calculated by the method known as "the weighted arithmetic mean of price relatives".

The items and weights used in the Index were derived from reported values of each material used in selected representative houses constructed in or about 1968-69 in each State capital city. The selection took account, within the four major construction types, of a range of characteristics of these houses—e.g., internal partitions, windows, roofing, etc., as well as whether such things as paths and fences were included in the job. As opposed to the Wholesale Price Index of Materials Used in Building other than House Building, each State capital city has a unique weighting pattern which reflects the difference in the estimated relative importance of given items as between cities.

Items are combined in eleven groups in addition to the "all groups" index. Some items carry the weight of similar items not directly priced. They are described in terms of fixed specifications with the aim of recording price changes for representative materials of constant quality.

**MELBOURNE—WHOLESALE PRICE INDEX OF MATERIALS
USED IN HOUSE BUILDING**

(Base of each index : Year 1966-67 = 100.0)

Group	1967-68	1968-69	1969-70	1970-71
Concrete mix, cement and sand	100.0	101.1	103.3	110.4
Cement products	104.0	108.2	118.8	129.9
Clay bricks, tiles, etc.	102.4	107.7	110.9	115.7
Timber, board, and joinery	99.6	101.5	103.8	109.2
Steel products	101.5	104.8	110.3	113.9
Other metal products	104.1	107.1	112.0	114.0
Plumbing fixtures, etc.	100.9	101.6	103.1	110.9
Electrical installation materials	103.4	105.3	116.6	114.7
Installed appliances	100.9	99.9	101.8	102.7
Plaster and plaster products	102.0	103.8	106.0	111.6
Miscellaneous materials	103.2	104.7	107.5	111.4
All groups	101.3	103.6	107.2	112.3

Index numbers for each of the eleven groups and for "all groups" have been compiled for the six State capital cities separately and combined for each month from July 1966 and for financial years from 1966-67. The reference base year for each index is 1966-67=100.0.

Export Price Index

For the period from July 1959 to June 1969 changes in the level of export prices of selected major groups of items were indicated by a fixed weights index which made no allowance for variations in quantities exported (see pages 223-4 of *Victorian Year Book 1970*). Since June 1969 the Index has been compiled on an interim basis which incorporates a re-weighting of the items contained in the previous series and the inclusion of some additional items. This interim basis will apply until completion of the review of content and weighting pattern referred to in the *Victorian Year Book 1970*.

In the interim series weights have been derived from values of exports for the year 1969-70 and the group weights have been adjusted to reflect the proportion that the value of wool bore to the value of all exports in that year. In addition to the 29 items of the previous index the interim index includes a further four items, namely, iron ore, bauxite, alumina, and mineral sands. Pending re-grouping in the final index these items are not attached to any of the previous single groups whose item content is therefore unchanged. The four new items are incorporated in the "all groups" index number but only from the link date June 1969. The 33 items contained in the interim series constituted 74 per cent of the total value of Australian exports (merchandise and non-merchandise) in 1969-70.

The price series used in these indexes relate generally to specified standards for each commodity and in most cases are combinations of prices for a number of representative grades, types, etc. For some commodities price movements in the predominant market, or markets, are used, while for other commodities average realisations in all export markets are used. As nearly as possible, prices used are on the basis f.o.b. at the main Australian ports of export.

Index numbers for each of the groups of the previous index and for "all groups" are shown in the table below (linked as at June 1969). The

Index is published monthly and the index figures in the table are simple averages of the twelve monthly index numbers in each respective year.

EXPORT PRICE INDEX NUMBERS
(Base of each index : Year 1959-60 = 100)

Period	Wool	Meats	Dairy produce	Cereals	Dried and canned fruits	Sugar	Hides and tallow	Metals and coal	Gold	All groups
1961-62	97	100	81	106	95	91	84	91	100	96
1962-63	104	101	88	107	90	107	72	89	100	101
1963-64	120	105	93	107	98	175	73	101	100	114
1964-65	102	110	94	107	100	100	91	123	101	105
1965-66	107	120	86	107	102	84	107	122	101	107
1966-67	103	124	84	114	101	67	89	117	101	105
1967-68	95	125	79	109	95	67	67	120	104	100
1968-69	99	131	72	104	97	72	73	123	117	102
1969-70 (a)	87	148	73	96	99	94	93	143	109	103
1970-71 (a)	67	152	88	100	102	113	94	139	109	101

(a) Interim series, subject to revision.

Further reference. COMMONWEALTH BUREAU OF CENSUS AND STATISTICS. *Labour Reports.*

5

LOCAL GOVERNMENT

ADMINISTRATION

Local Government Department

The *Local Government Department Act* 1958 constituted a department called the Local Government Department "for the better administration of the laws relating to local government in Victoria". The legislation was brought into operation on 23 December 1958 by a proclamation of the Governor in Council published in the *Government Gazette* on that date. Officers and employees of the Local Government Branch of the Public Works Department were, as a result, transferred and attached to the new Department.

The following Acts of Parliament come within the ambit of the responsibilities of the Minister for Local Government :

Local Government Act

Acts relating to local government in the Cities of Melbourne and Geelong

Country Roads Act

Cultural and Recreational Lands Act

Dog Act

Drainage Areas Act

Hawkers and Pedlars Act

Litter Act

Local Authorities Superannuation Act

Markets Act

Melbourne and Metropolitan Board of Works Act

Newmarket Sheep Sales Act

Petrol Pumps Act

Pounds Act

Public Authorities Marks Act

Public Contracts Act

Town and Country Planning Act

Tramways Act

Valuation of Land Act

Weights and Measures Act

Constituting and altering the constitution of municipalities

The *Local Government Act* 1958 provides machinery for the creation of new municipalities and for alterations to the boundaries of existing

ones. The power to make Orders on this subject is conferred on the Governor in Council, who acts on the recommendation of the Minister for Local Government. All such Orders are published in the *Government Gazette*. The powers conferred on the Governor in Council include authority to do the following :

1. To constitute new shires. Practically the whole of Victoria is included in municipal districts, and therefore any new municipalities will almost inevitably be created from the territories of existing ones. Before any area of land in Victoria may be constituted a shire it must contain rateable property having a net annual value of not less than \$400,000 which yielded not less than \$60,000 in general and extra rates for the last completed municipal year.

2. To constitute new boroughs, towns, or cities. Any area of land in Victoria may be constituted a borough provided such area :

- (i) is substantially urban in character ;
- (ii) has a population of at least 4,000 inhabitants ;
- (iii) contains rateable property having a net annual value of at least \$400,000 ; and
- (iv) contains rateable property which yielded a revenue of at least \$60,000 from general and extra rates for the last completed municipal year.

To be constituted a town or city the area must meet the appropriate requirements set out in (6) below.

3. To unite two or more municipalities whose municipal districts form one continuous area.

4. To sever part of one municipality and annex such part to another municipality.

5. To subdivide or re-subdivide any municipality or to alter the boundaries of or abolish the subdivisions of any municipal district. (The subdivisions of a city, town, or borough are called "wards" and those of a shire "ridings". The maximum number of subdivisions permitted in any municipality except the City of Melbourne, is eight. Melbourne has eleven wards. Most Victorian municipalities are subdivided.)

6. To proclaim municipalities which are substantially urban in character to be boroughs, towns, or cities. Any such shire which satisfies the requirements set out in (2) above may be proclaimed a borough. Any such municipality which has a population of at least 5,000 inhabitants and yielded a revenue of at least \$80,000 from general and extra rates in the last completed municipal year may be proclaimed a town. Any such municipality which has a population of at least 10,000 inhabitants and yielded a revenue from general and extra rates of not less than \$160,000 in the last completed municipal year may be proclaimed a city.

Action on these matters can be initiated locally, in some instances, by a request addressed to the Governor in Council and signed by a prescribed number of persons enrolled on the municipal voters' roll. The proposal set out in the request must be submitted to a poll held in conjunction with the next annual election of councillors. In other instances a petition under the seal of the council suffices. There is an Advisory Board of three persons, constituted under the Local Government Act, which investigates these matters and advises the Minister on them.

During the period 1 July 1970 to 30 June 1971 no new municipalities were created, but the Shire of Croydon was proclaimed a City from 22 May 1971.

Valuer-General and Valuers' Qualification Board

A Valuer-General was first appointed in Victoria under the *Valuation of Land Act* 1960. The purpose of this legislation is the co-ordination of rating valuations for municipalities and other rating authorities and the improvement of the standard of valuations in Victoria. Municipalities are now the only rating authorities making valuations in the State, and each attends to the special rating valuation requirements of other authorities in its municipal district.

The Valuer-General's Office confers with the valuers appointed to make the valuation and with councils on the general levels of values to be used, and is available to give advice during the valuation or subsequently. The Valuer-General is empowered to make valuations on request for all government departments and public authorities, for probate duty and stamp duty and, by agreement, for settling disputes as to the value of property.

The Valuers' Qualification Board may either conduct examinations of persons desiring to qualify as valuers or prescribe examinations or qualifications which it is prepared to accept for the purpose. A two year (four year part-time) diploma course is conducted by the Royal Melbourne Institute of Technology. Successful candidates must also complete four years of practical work within six years prior to their application in order to obtain a certificate.

Municipal Fees Committee

The Municipal Fees Committee was constituted to provide on request a minimum valuation contract fee for municipalities wishing to carry out a general revaluation.

Previously a contract valuer could not be appointed to value rateable property in a municipality unless the Valuer-General certified that the remuneration and the other conditions of employment would enable a satisfactory valuation to be made. The Municipal Fees Committee provides an alternative for a council which may elect to have the minimum fee fixed by the Committee and then appoint a qualified valuer at such fee.

Land Valuation Boards of Review

Land Valuation Boards of Review were provided for by the *Valuation of Land (Valuations) Act* 1964. The purpose of the legislation was the provision of an informal and inexpensive means of determining disputes as to the valuation of real property whether for rating or taxing purposes or in respect of compulsory acquisitions.

In rating and taxing matters appeals are heard by a Board except where the appeal is against a capital improved value of \$10,000 or more, a net annual valuation of \$500 or more, or an unimproved capital value of \$2,000. In those cases the appellant may have the appeal heard by a Board or the Supreme Court, at his option.

In disputes on land acquisition the hearing is before a Board when the claim does not exceed \$10,000 unless the Supreme Court decides on

application by either party that the issues involved warrant a Court hearing. When the claim exceeds \$10,000 the hearing may be before either the Court or a Board at the option of the claimant.

Each Board of Review is composed of a chairman and two valuers. The latter are selected from a panel having regard to the location and use of the land.

Weights and measures

The administration of the Victorian Weights and Measures Act is divided into central and local administration. The Weights and Measures Branch under the Superintendent of Weights and Measures is responsible for central administration. Local administration is carried out by municipal councils or groups of councils known as Weights and Measures Unions. The Commonwealth *Weights and Measures (National Standards) Act* 1960 also affects administration in Victoria. That Act established a National Standards Commission which is responsible for national standards and also examines and approves patterns of weighing and measuring instruments proposed to be used for trade.

As it is intended to convert Australia's weights and measures to the metric system, an interdepartmental committee with the Superintendent as chairman has been formed to contribute to the necessary planning.

Inspection of scaffolding

The Local Government Act makes municipal councils responsible for the inspection of scaffolding erected to support workmen engaged in the construction of buildings or in carrying out other works. Councils administer the Scaffolding Regulations made by the Governor in Council. Draft regulations are prepared by a Scaffolding Regulations Committee comprising representatives from government departments, the Municipal Association, the Master Builders' Association, the Trades Hall Council, and the Australian Institute of Building Surveyors. The work of councils in this field is supervised by a Supervisor of Scaffolding Inspection and Assistant Supervisors who are officers of the Local Government Department. There is a Municipal Scaffolding Inspectors Board which examines and issues certificates of qualification to municipal scaffolding inspectors. The Board is also empowered to issue certificates of competency to scaffolders. Since January 1971 it has been necessary for every person who erects, alters, or demolishes certain types of scaffolding, to hold either a certificate of competency or a permit to work under the supervision of a qualified scaffolder. The scaffolding concerned is cantilever scaffolding, suspended scaffolding, bracket scaffolding from which a person could fall a greater distance than 14 ft, or any other scaffolding (not being a ladder) the working platform of which has a height greater than 14 ft above the supporting surface. Legislation is referred to on page 224 of the *Victorian Year Book* 1968.

The *Scaffolding Act* 1971 provides for the transfer of the administration of the supervision of scaffolding inspection to the Department of Labour and Industry and the setting up of an Inspectorate in that Department to inspect scaffolding within seven municipalities (the central metropolitan area). The administration of scaffolding will remain with municipalities

(except the central area) while the supervision will transfer to the Department of Labour and Industry.

Municipalities

At 30 June 1971 Victoria was divided, for local government purposes, into 210 municipal districts and the Yallourn Works Area. This latter was severed from the municipal districts of which it then formed part by the *State Electricity Commission (Yallourn Area) Act 1947*. For certain purposes, it is deemed to be a borough, and municipal administration is the responsibility of the Commission, assisted by an Advisory Council. The 210 municipalities comprised :

Cities	62
Towns	5
Boroughs	8
Shires	135
	<hr/>
	210

The only unincorporated areas of the State are French Island (65 sq miles) in Western Port, Lady Julia Percy Island (1.02 sq miles) off Port Fairy, Bass Strait Islands (1.51 sq miles), Gippsland Lakes (part) (128 sq miles), and Tower Hill Lake Reserve (2.28 sq miles) adjacent to the Borough of Koroit.

Municipal councils

The powers vested in municipal corporations are exercised by councils elected by persons who are enrolled on the municipal voters' rolls. The number of councillors for each municipality must be some multiple of three, not less than six, nor more than twenty-four (except the City of Melbourne, which has thirty-three councillors). Subdivided municipalities have three councillors for each subdivision.

Any person who is the owner or occupier of property of a rateable annual value of at least \$40, is eligible to stand for election as a councillor of the municipality in which the property is situated. Councillors serve in an honorary capacity. They must elect one of their number to be chairman. In a city, town, or borough, the chairman is known as the Mayor (the Lord Mayor in the case of the City of Melbourne) and in a shire, the President. Councillors hold office for three years, and each year one third of the total number allotted to each municipality retires in rotation.

A councillor who has any direct or indirect pecuniary interest in any contract or proposed contract with the municipality or in any other matter in which the municipality is concerned, and is present at any meeting of the council at which the contract or other matter is being considered must disclose his interest and is not permitted to remain in the room where the meeting is being held during discussion of or voting on the contract or other matter. Councillors are liable for heavy penalties if moneys are wrongfully borrowed or expended, and may have to repay the moneys so borrowed or expended.

Elections

Municipal elections are held annually in August. Extraordinary elections may be held to fill vacancies occurring between annual elections a person

is entitled to be enrolled on the voters' roll of any municipality if he or she is a natural born or naturalised subject of Her Majesty and has attained the age of 18 years (an amendment of the Local Government Act in April 1970 reduced the age provision from 21 to 18 years) and :

(a) is liable to be rated in respect of property within a municipal district ;
 (b) is the spouse of a person entitled to be enrolled in respect of property within the municipal district upon which that person and his or her spouse reside if the said spouse is not liable to be rated in respect of such property; and provided that the spouse shall make written application for enrolment to the council ;

(c) is the owner of any rateable property in respect of which some other person is liable to be rated as occupier.

If a corporation owns or occupies rateable property it must appoint some person to be enrolled in its place. In the case of public statutory corporations, however, this is optional. No person is entitled to be enrolled for property which has a net annual value of less than \$25, unless there is a house on such property and the person resides there.

Plural voting was abolished by legislation enacted in 1969. Each person enrolled on the municipal roll now receives only one vote. A person may, however, be enrolled in more than one subdivision of a municipality and may vote once at any election of councillors for each such subdivision. In the case of polls under Part II of the Local Government Act (i.e., on severances, re-subdivisions, and the constitution of new municipalities, etc.), polls on changes in the basis of rating, and polls on proposed borrowings, each voter has only one vote whether enrolled in more than one subdivision or not.

Voting is compulsory in 73 municipalities.

Officers

Each council must appoint a municipal clerk (he is known as the town clerk in a city, town, or borough, and the shire secretary in a shire), an engineer, and such other officers as may be necessary. The other officers usually include a building surveyor, a valuer, a rate collector, a medical officer of health, and a health inspector. The Local Government Act requires that certain officers must obtain special qualifications from examining boards constituted under the Act. The officers who must hold these special qualifications before appointment are municipal clerks, engineers, electrical engineers, and building surveyors. The Health Act requires that medical officers of health shall be duly qualified medical practitioners, and that every health inspector shall hold a prescribed certificate of competency. In the terms of the Valuation of Land Act an appropriate certificate must also be held by municipal valuers.

Powers and duties of municipalities

The Local Government Act and other Acts of Parliament confer powers and impose duties on municipal councils. Some of these are as follows :

By-laws

Councils may make by-laws on a number of subjects specified in the Local Government Act and other Acts. The power to make laws of local

application is delegated by Parliament, and councils must be careful not to exceed the authority conferred upon them.

Roads and bridges

The construction and maintenance of roads and bridges has always been one of the principal functions of municipalities. With the exception of those roads which are the responsibility of the Country Roads Board or the Melbourne and Metropolitan Board of Works, councils have the care and management of all public highways (i.e., streets and roads which the public have a right to use) in the municipal district, and have a duty to keep them open for public use and free from obstruction. The Country Roads Board is wholly responsible for the cost of maintaining proclaimed State highways, freeways, tourists roads, and forest roads, and shares with local councils the cost of maintaining main roads. Subsidies are also granted to councils from the funds administered by the Board for works on unclassified roads. In the Melbourne metropolitan area, the Melbourne and Metropolitan Board of Works is wholly responsible for any roads or bridges declared to be metropolitan main highways or metropolitan bridges.

Private streets

A "private street" as defined in Division 10 of Part XIX of the Local Government Act is, broadly speaking, a street set out on privately owned land, as opposed to a street set out on land of the Crown or of a public authority. Under certain circumstances, councils may construct such private streets and charge the cost, or part of the cost, to the owners of the land abutting on the street.

After construction, the maintenance of a private street becomes the responsibility of the council. When a council constructs a street which is not a private street as defined above, it may charge abutting owners half the cost of making the footpath and kerb (or the kerb and channel if these are cast in one piece).

Sewers, drains, and watercourses

With certain exceptions, every council has vested in it responsibility for all public sewers and drains within its municipal district or of which it has the management and control, and all sewers and drains, whether public or not, in and under the streets of such municipal district. The exceptions to this rule are sewers and drains vested in any other municipality, the Melbourne and Metropolitan Board of Works, the Geelong Waterworks and Sewerage Trust, the Latrobe Valley Water and Sewerage Board, and any sewerage authority under the Sewerage Districts Act. Councils may enlarge or otherwise improve any sewers or drains vested in them and may also scour, cleanse, and keep open all ditches, creeks, gutters, drains, or watercourses within or adjoining their municipal districts. When a drainage area is constituted in any municipal district under the Drainage Areas Act, additional drainage powers are conferred on the council. Drainage areas may be constituted by the Governor in Council on the petition of the council or of land owners in the area. Both the Local Government Act and the Health Act confer powers on councils to provide for the proper drainage of houses, buildings, or land, and, in some instances, the owners of land benefiting as a result of this may be required to meet the cost.

Water supply and sewerage

In the Melbourne metropolitan area, the Melbourne and Metropolitan Board of Works is responsible for water supply and sewerage (see pages 253–8). The members of the Board are municipal councillors nominated by the councils in the metropolitan area. Outside the metropolitan area, the special water and sewerage needs of the Geelong district and the La Trobe Valley are served by the Geelong Waterworks and Sewerage Trust and the Latrobe Valley Water and Sewerage Board, respectively. Elsewhere outside the metropolitan area, the Governor in Council may constitute waterworks trusts and sewerage authorities, under the provisions of the Water Act and the Sewerage Districts Act, respectively (see pages 252–3). Members of a municipal council may, together with Government nominees, be the members of the sewerage authority or waterworks trust. Alternatively, some members of these bodies may be elected by councillors or ratepayers. In many instances, municipal officers also carry out duties for waterworks trusts and sewerage authorities. The Water and Sewerage Districts Acts are administered by the Minister of Water Supply. Seventeen councils operate waterworks under powers provided in the Local Government Act and, in addition, thirteen municipalities have been constituted local governing bodies, under the provisions of the *Water Act* 1958, with defined water supply districts.

Building control

Since 1945 building in most municipalities in Victoria has been subject to a building code, known as the Uniform Building Regulations, which is administered by municipal councils. These regulations apply in cities and towns and may be applied in the whole or any part of any borough or shire, if the council concerned so desires. At 30 June 1970 only seven shires had not adopted the regulations.

Municipalities have power to make by-laws regulating buildings, but the Uniform Building Regulations, in the municipalities where they apply, would override any provisions of such by-laws. The regulations leave certain matters to be determined by councils which are empowered to make by-laws for the purpose. These by-laws are subject to approval by the Governor in Council. The Uniform Building Regulations are made on the recommendation of the Building Regulations Committee. The members of this body are appointed by the Governor in Council and include representatives of government departments, the municipalities, the Royal Victorian Institute of Architects, the Institution of Engineers (Australia), and the Master Builders' Association of Victoria. In addition to its function of preparing draft regulations, the Committee acts as a referee to determine disputes arising out of the regulations and may also, on the application of any party concerned, modify or vary the regulations in special cases.

Town and country planning

Councils have power under the Local Government Act to make by-laws prescribing areas as residential or business areas, and, by this means, may achieve a degree of town planning. Since 1944, however, councils have had power to prepare planning schemes to regulate the use of land in the whole or any part of their municipal districts. When a council has

commenced preparation of a planning scheme, it may make an interim development order to control use of land in the planning area until a scheme is in force. Both the interim development order and the planning scheme are subject to the approval of the Governor in Council. The Town and Country Planning Board, constituted under the Town and Country Planning Act, makes reports and recommendations to the Minister on planning schemes and town planning matters generally. The Board may itself prepare a planning scheme for a particular area at the direction of the Minister. By legislation enacted in 1949 the Melbourne and Metropolitan Board of Works was charged with the duty of preparing a planning scheme for the Melbourne metropolitan area. This scheme—the Melbourne Metropolitan Planning Scheme—was approved on 30 April 1968 and came into operation on 22 May 1968. Subsequent to approval of the scheme the Board delegated to municipal councils in the planning area certain of its powers, authorities, and responsibilities in relation to the administration, enforcement, and carrying out of the scheme.

Local planning schemes and interim development orders were continued in operation to permit any desirable features of the local schemes to be incorporated in the metropolitan scheme by way of amendment. This is now being done and local schemes and interim development orders have been or will in due course be revoked.

Legislation enacted in 1969 to amend the Town and Country Planning Act provided for a State Planning Council and for the establishment of regional planning authorities. The State Planning Council will co-ordinate planning by State instrumentalities and semi-government authorities for future works and development and will act as a consultant and advisor to the Town and Country Planning Board on planning at the State level. Regional planning authorities may be constituted for the purpose of preparing planning schemes for areas extending beyond the boundary of one municipal district and may also subsequently administer such schemes. The same legislation also made substantial additions to the Melbourne metropolitan area to enable the Melbourne and Metropolitan Board of Works to prepare a planning scheme for the extended area.

Town Planning Appeals Tribunal

This body was initially provided for by the *Town and Country Planning (Amendment) Act* 1968. It currently consists of six persons and sits in divisions each of which is composed of a chairman, who is required to be a barrister and solicitor, and two members being, respectively, persons with a knowledge of town planning and of public administration, commerce, or industry.

The Tribunal hears and determines appeals by applicants for a permit under interim development orders and planning schemes against the refusal or failure of the responsible authority to grant a permit or against any unacceptable condition in a permit; also appeals by objectors against the determination of the responsible authority to grant a permit. The members of the Tribunal are not officers of the Department. Appeals must be lodged with the Registrar of Town Planning Appeals. He and his staff are officers of the Department.

Other powers and duties

Councils are empowered to deal with slum reclamation and to provide

dwellings for persons of small means. Some councils have entered this field in conjunction with the Housing Commission.

Under financial agreements between certain councils and the Housing Commission for the purpose of slum reclamation, the following amounts have been provided by councils up to 30 June 1970: City of Melbourne \$1,224,000, City of Port Melbourne \$39,600, City of Prahran \$280,000, City of Richmond \$15,850, City of South Melbourne \$75,800, City of St Kilda \$20,000, and City of Williamstown \$70,400.

To enable the erection of dwellings for elderly persons with limited means, many councils in various parts of the State have acquired land and donated it to the Housing Commission.

Some of the powers available to municipal councils have rarely been used or are now falling into disuse. They may operate gasworks or generate electricity, but there are now no municipalities operating gasworks and only the City of Melbourne generates electricity. However, a number still purchase electricity in bulk and retail it. Some of the other more usual functions of municipalities are:

1. supervision of land subdivision and the laying out of streets on private property;
2. removal and disposal of household and trade waste;
3. sweeping, cleansing, and watering of streets;
4. supervision of boarding houses, lodging houses, eating houses, and food premises, including inspection of foodstuffs in shops;
5. provision and maintenance of parks, gardens, recreation reserves, swimming pools, libraries, and museums;
6. registration of dogs;
7. establishment of infant and pre-school welfare centres;
8. establishment of emergency home-help services;
9. appointment of street parking areas and off-street parking areas for motor cars, and the collection of parking fees;
10. supervision of weights and measures; and
11. traffic engineering.

Revenue

The works and services provided by Victorian municipalities are financed largely from local taxes (rates) which are levied on the owners or occupiers of rateable property in each municipal district.

Other sources of revenue include income from public works and services, government grants, licence fees, and miscellaneous income.

Revenue from public works and services comprises charges for garbage disposal, sanitary and other health services, contributions to road and pavement works, and sundry income from the hire of council properties.

Some municipalities also operate business undertakings, such as electric supply, abattoirs, pipe works, quarries, and waterworks, and for the 1969 municipal year the combined turnover of these undertakings was approximately \$58m.

Rating of land and property

All land (including houses and buildings) in a municipal district is rateable, unless specifically exempted by the Local Government Act.

Non-rateable land is defined fully in the Act, but, in general, it consists of land owned or used by the Government, by certain public bodies, churches, and charitable organisations.

The council of every municipality is required, from time to time, to have a valuation made of all rateable property within the municipal district.

Metropolitan municipalities which have at least one whole subdivision subject to any rate made by the Melbourne and Metropolitan Board of Works must have valuations at not more than four year intervals. In other municipalities valuations must be made at not more than six year intervals. These provisions are aimed at ensuring a uniformity of municipal valuations used by large rating authorities covering more than one municipality.

In Victoria, a municipality is required to rate on the net annual value of rateable property unless, at the instance of the council, or as the result of a poll of its ratepayers, it has decided to rate on unimproved capital value, or (since 1 June 1968) partly on net annual value and partly on unimproved capital value. Under the latter system a proportion of the required revenue is obtained by levying an appropriate rate on the net annual value of rateable property and the balance from an appropriate rate on the unimproved capital value of the rateable property. The proportions are fixed when the system is adopted.

The amending legislation which provides for a combination rate also provides for the gradual replacement of unimproved capital value as a basis of rating by a modified form of unimproved capital value known as site value. Replacement will be effected gradually as valuations are made on the new bases throughout the State.

The net annual value of a property is the rental it might be expected to earn from year to year if let, after deducting expenses such as rates, taxes, and insurances, but shall not be less than 5 per cent of the capital value.

The unimproved capital value, however, is the amount a property might be expected to realise if sold in an unimproved state. It is the amount a purchaser might reasonably expect to pay for land, assuming that no improvements had been effected to it.

Site value differs from unimproved capital value in that the valuer is not required to notionally restore the land to its primitive condition. Instead, the improvements which are to be imagined as not existing are those which can be seen, i.e., buildings, fences, sown pastures, etc., and including works undertaken on the land such as the removal of timber or stone, draining or filling of the land, erosion works, etc., which have been made within the 15 years last preceding the valuation.

Of the 210 municipalities in Victoria at 30 September 1970, 156 were rating on net annual value, 53 on unimproved capital value, and one, the City of Caulfield, partly on net annual value and partly on unimproved capital value.

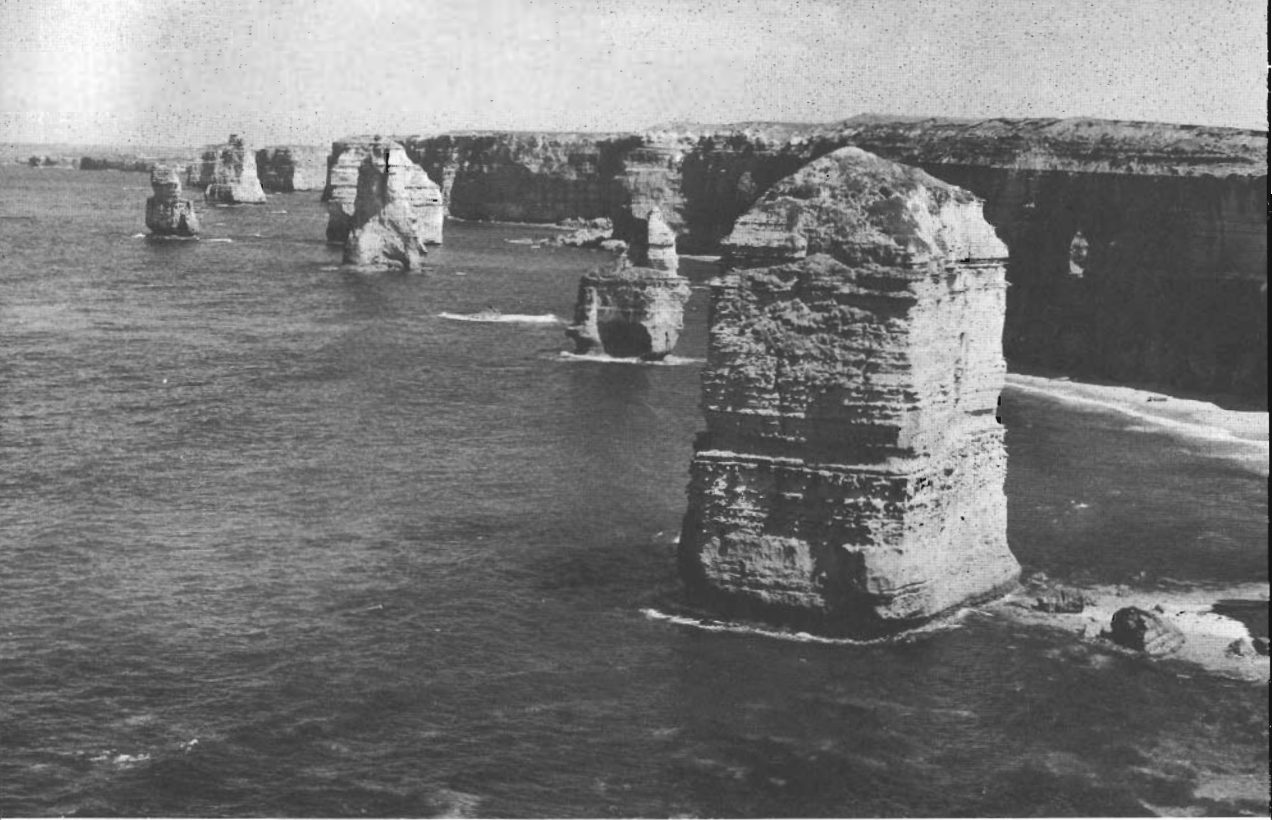
The principal rate levied by a municipality is the general rate. This is made for the purpose of defraying the ordinary expenditure of the council, and is paid into the general fund of the municipality known as the Municipal Fund.

The general rate must be made at least once in each municipal year, and in any one year shall not exceed 20c in the \$1 or be less than 3c



South East Point on Wilsons Promontory in late December.

Dr L. H. Smith



The Twelve Apostles near Port Campbell.
Dr L. H. Smith



Loch Ard Gorge near Port Campbell.
Dr L. H. Smith

in the \$1 of the net annual value of the rateable property. For certain special purposes, however, a municipality may raise its general rate above the limitation imposed by the Local Government Act.

Before making a general rate, a municipality must prepare an estimate of the amount required to defray the expenditure of the council for the period to be covered by the rate, and then to strike a rate that will be sufficient to raise the money so required. In a subdivided municipality, an extra rate may be made by the Council, in any subdivision or any part of it, on the request of not less than two thirds of the councillors of the subdivision in which it is to be raised. In certain circumstances, an extra rate may also be made and levied in a municipality which is not subdivided.

Except for the special purposes mentioned above, the aggregate amount of general and extra rates levied in any subdivision is not to exceed 20c in the \$1 of the net annual value of the rateable property. An extra rate may be made for a period of not less than three months but not exceeding one year, as the council thinks fit.

A ratepayer may elect to pay any general or extra rate made for a period of one year in four equal instalments on or before the last day of December, February, May, and August, respectively. If the rate notice is posted on or after 18 December, the first instalment is payable within fourteen days of the date of posting of the rate notice.

Apart from general and extra rates, a municipality, in certain circumstances, may levy a separate rate (or make a special improvement charge) on a section of the municipality, for the purpose of defraying the cost of special works or undertakings which benefit the ratepayers in that particular area.

Other types of rates which may be levied by municipalities include a sanitary rate (or sanitary charge) under the provisions of the Health Act, for the purpose of providing for the disposal of refuse or nightsoil, and a rate under the provisions of the Country Roads Act for the purpose of raising certain moneys payable by the council to the Country Roads Board.

Government grants

Although government grants (apart from those allocated through the Country Roads Board) form only a small part of municipal revenue, the special purposes for which they may be obtained have tended to increase. These purposes include pre-natal and infant welfare centres, crèches and pre-school centres, elderly citizens centres, immunisation, home help service, libraries, public halls, recreation areas and swimming pools, vermin destruction bonuses, main drains in country centres, and drainage works in drainage areas. Municipal endowment for the more needy municipalities was paid almost from the inception of local government in Victoria until the onset of the depression. Subsequently, unemployment relief grants were made annually for a number of years for various municipal works, and, since the Second World War, an amount (currently \$600,000) is provided annually towards the cost of works of municipalities and other public bodies. In 1950 the Municipalities and Other Authorities Finances Act put this arrangement on a permanent basis.

Municipalities Assistance Fund

The Municipalities Assistance Fund was established in 1951 and derives its income from a proportion of motor drivers' licence fees and motor driving instructors' licence fees, less cost of collection in both cases; a contribution by the Treasury to the Fund being made should the Fund be insufficient to meet its authorised payments.

From 1 January 1971 the fee for a motor driver's licence was increased from \$6 to \$12 (licence current for a three year period) by the *Motor Car (Fees) Act* 1970. The proportion of the amount collected from such fees, less cost of collection, payable to the Municipalities Assistance Fund is currently one quarter. The Act reduced from one half to one quarter the proportion of the amount of all motor driving instructors' licence fees, less cost of collection, to be paid into the Fund.

Payments are made from the Fund, first, towards the cost of works of municipalities and other public bodies, and second, towards the annual cost of the Country Fire Authority, in order to relieve country municipalities of the contributions to that body which they were formerly required to make. The municipal works usually subsidised from the Fund are the establishment and improvement of recreation reserves (including toilet blocks, dressing sheds, and fencing), children's playgrounds, and public comfort stations.

The amount which may be allocated by the Minister from the Fund, in any one financial year, for subsidies towards the cost of works of municipalities and other public bodies was originally fixed at \$200,000. Subsequent legislation increased this amount in 1959 to \$300,000, in 1961 to \$400,000, in 1967 to \$500,000, and in 1971 to \$600,000.

For the year ended 30 June 1970 subsidies for works paid to various municipalities from the Municipalities Assistance Fund amounted to \$499,998, while, for the same period, the amount contributed to the Country Fire Authority was \$1,225,416.

Country Roads Board recoups and grants

Municipalities throughout Victoria undertake construction and maintenance work on main roads within their boundaries, on behalf of the Country Roads Board, under the provisions of the Country Roads Act. Expenditure on this work is incurred in the first instance by the municipalities, but, subject to adherence to prescribed conditions and satisfactory performance of the work, this expenditure is refunded to the municipalities by the Board. Each municipality undertaking main road maintenance work, however, is required to make an annual contribution to its cost and this is calculated by the Board as a proportion of the total maintenance expenditure on each road for the particular year. The proportion payable varies according to the capacity of the municipality to pay, and the extent to which it has benefited from the work done.

For the purpose of making and maintaining certain rural roads (known as unclassified roads), municipalities also receive grants from the Country Roads Board from funds provided by the Commonwealth Government under the provisions of the Commonwealth Aid Roads Acts. (See page 251.)

Expenditure

The ordinary revenue of a municipality is applied to providing works and services for its ratepayers. These works and services comprise construction and maintenance of roads, streets, and bridges, provision of sanitary, garbage, and other health services, provision and maintenance of parks, gardens, and other council properties, repayment of moneys borrowed for permanent works and undertakings, and other sundry works and services.

Borrowing powers

Extensive borrowing powers are conferred on municipalities by the Local Government Act to enable them to undertake large scale works, or purchase expensive equipment in circumstances where it is advisable, on economic grounds, for the costs to be spread over a number of years. In practice, municipalities seldom borrow to the limit of their powers, and their capacity to borrow is limited by the general allocation of loan funds and the state of the loan market.

Money may be borrowed for permanent works and undertakings (as defined in the Local Government Act), or to liquidate the principal moneys owing by the municipality on account of any previous loan. Under a municipality's ordinary borrowing powers the amount borrowed shall not exceed the net annual valuation of all rateable property in the municipal district, as shown by the municipality's last audited financial statement; provided that, where money is borrowed for gas or electric supply, water, quarrying, or abattoirs, an additional amount may be borrowed, not exceeding one half of the net annual value of all rateable property in the municipal district, as shown by the last audited financial statement.

Under extended borrowing powers, a municipality may borrow additionally, on the security of its income, an amount not exceeding five times the average amount of such income for the preceding three years. Income for this purpose excludes rates and licence fees.

Moneys borrowed under the ordinary or extended borrowing powers may be raised by the sale of debentures or by mortgage agreement. Repayment of any such loan may be made by periodical instalments of principal and interest, or by the creation of a sinking fund for the purpose of liquidation of the loan at the end of its term.

Before proceeding to borrow money for permanent works and undertakings, a municipality is required to prepare plans and specifications and an estimate of the cost of the works and undertakings to be carried out, together with a statement showing the proposed expenditure of the amount to be borrowed. This information is to be available for a specified period for inspection by any ratepayer. The Local Government Act provides that notice of intention to borrow shall be advertised, and also contains provisions under which a number of ratepayers may oppose the proposal to borrow and demand that it be submitted to a poll of ratepayers. Should a poll be held and a majority of ratepayers vote against the proposal, the loan is forbidden.

Subject to the approval of the Governor in Council, a municipality may also borrow, to a limited extent, from an adjoining municipality, by a mortgage or first charge over a proportion of its income, for the purpose

of making or repairing roads leading into the district of the municipality which lends the money.

A municipality may also borrow by mortgage agreement or by the issue of debentures, on the security of a separate rate or special improvement charge, for the purpose of carrying out the works for which the rate was levied or the charge made.

In addition to the powers mentioned above, a municipality may borrow, by means of overdraft from its bankers, for the following purposes :

1. temporary accommodation on current account ;
2. private street construction ;
3. works carried out under the Country Roads and Commonwealth Aid Roads Acts ; or
4. purchase and acquisition of land, or the payment of compensation in connection with certain specified schemes.

Investment of municipal funds in the short-term money market

Since June 1962 it has been lawful for any municipality to invest by deposit part of its municipal fund, or other moneys belonging to it, in the short-term money market.

The councils, however, may invest only with authorised dealers who have been so declared for the purpose under the provisions of section 38 of the *Companies Act* 1961. Through these dealers (at present nine in number) municipalities may invest at call, or for short-term, minimum amounts of \$50,000. (See also pages 686-8.)

Loans to this market are fully secured by Australian government securities equal in market value to the amounts deposited. The Reserve Bank stands behind the dealers as a lender of last resort. Authorised dealers are thus at all times in a position to meet their obligations.

Investment in the short-term money market can be a useful source of additional revenue for councils. Frequently, municipalities have substantial loan funds idle for short periods, and at certain times of the year may accumulate substantial revenue credits on current account. These are likely sources of municipal investment in the short-term market.

Accounts

Every municipality is required to keep proper books of account in the form prescribed for use by all municipalities in Victoria, and these must be balanced to 30 September in each year. The accounts must be audited by an auditor qualified in terms of the Local Government Act and appointed by the Governor in Council.

Municipal Association of Victoria

All municipalities in Victoria are members of the Municipal Association which was founded in 1879 and given statutory recognition by the *Municipal Association Act* 1907. The Association was established, to quote the preamble to that Act, "for the purpose of promoting the efficient carrying out of municipal government throughout the State of Victoria and of watching over and protecting the interests, rights, and privileges of Municipal Corporations". The State Government has also found the Association a valuable organisation, because it simplifies its task

of dealing with the municipalities. The Association operates the Municipal Officers' Fidelity Guarantee Fund and under the *Municipal Association (Accident Insurance) Act 1964* was empowered to issue accident insurance policies insuring councillors of any municipality against accidents arising in the course of their municipal duties.

Local Authorities Superannuation Board

The Local Authorities Superannuation Act provides for a compulsory superannuation scheme for permanent employees of municipal councils, water and sewerage authorities, weights and measures unions, cemetery trusts, the Portland Harbor Trust, and the First Mildura Irrigation Trust.

The scheme is administered by a Local Authorities Superannuation Board and provides benefits for employees on retirement at the age of 65 years, or for their dependants should the employees die before reaching that age.

Important changes in the scheme, however, were provided for by the *Local Authorities Superannuation (Amendment) Act 1960*. Before this amending legislation, the scheme had been operated by the Board in conjunction with several approved life insurance organisations. Most permanent employees were required to effect, with an approved insurer, policies of endowment insurance maturing on retirement at 65 years of age. Those who became permanent employees when over 55 years of age, however, were required to contribute to a provident fund which was invested for their benefit by the Board. Benefits in each case took the form of lump sum payments on retirement at 65 years of age, or on prior death.

The amending Act reconstituted the Board by providing for the addition of two new members, increasing its membership from three to five. Provision was also made, as from the commencement of the amending Act, for the discontinuance of policies of insurance, and for the Board to take over and administer the insurance section of the scheme. It provided for the Board to "enter into contracts to provide benefits by way of superannuation, annuities, retiring allowances or payments on death, in respect of permanent employees".

Two important advantages seen in the new provisions are :

1. substantially increased benefits to contributors, payable on death before the age of 65 years, and expected increased benefits on retirement at the age of 65 ; and
2. an important new source of loan funds for local authorities.

Contributions to the scheme are based on a percentage of the salaries and wages of employees, and are met in equal proportions by employees and employers.

Before 1962 the accounting period of the Board ended at 30 June whereas the premium and contribution year closed at the end of February. Since 1962 the Board has adopted the year ending February as its accounting period.

Under the new scheme a Local Authorities Benefit Contracts Account was established by the Board in 1961. Transactions for the years 1965-66 to 1969-70 are given in the following table :

**VICTORIA—LOCAL AUTHORITIES SUPERANNUATION BOARD:
BENEFIT CONTRACTS ACCOUNT
(\$'000)**

Particulars	Year ending February—				
	1966	1967	1968	1969	1970
INCOME					
Premium income	2,094	2,502	2,807	2,998	3,362
Interest, dividends, and rents	712	828	955	1,106	1,254
Total	2,806	3,329	3,761	4,104	4,615
EXPENDITURE					
Contributions, refunds, death and withdrawal benefits	736	1,168	1,318	1,423	1,814
Contributions to management	168	198	210	246	276
Total	904	1,366	1,528	1,669	2,091
Operating surplus for year	1,902	1,963	2,234	2,434	2,525
Accumulated funds at end of year	12,686	14,649	16,883	19,317	21,842

The accumulated funds at 28 February 1970 consisted of investments in semi-governmental and local government loans and cash deposits.

The *Local Authorities Superannuation (Disability Benefits) Act 1970* introduced a scheme to provide benefits for permanent employees who are forced into premature retirement by becoming permanently incapacitated. This Act also provided that no further contributions shall be paid into the Provident Fund and that all permanent employees shall be brought within the provisions of the internal retirement and death benefits fund.

History of local government administration, 1961

Melbourne City Council

Organisation and functions

Melbourne has the distinction of being the oldest municipality in Victoria. Incorporated as a town by Act of the New South Wales Governor and Legislative Council in 1842, it was raised to the status of city by Letters Patent of Queen Victoria dated 25 June 1847.

The City of Melbourne still operates under sections of the 1842 Act and its amendments. All other municipalities (with the exception of Geelong which was given local government in 1849 by an extension of the 1842 Act) receive their enabling powers from the Local Government Act of Victoria. Parts only of this general Act apply to Melbourne. As regards other Acts of Parliament, there is no such nice distinction, and in common with other municipalities, Melbourne derives powers from or administers such Acts as Health, Pounds, Dog, Country Roads, Road Traffic, Weights and Measures, Town and Country Planning, Summary Offences, Petrol Pumps, Motor Car, Electric Light and Power, and Markets.

With a net annual value (for the year 1969–70) of \$55.7m, rate income of \$7.8m, other revenue of \$26.4m, and a work force of

approximately 2,800 employees, it is the foremost municipality in the State. Though its daily influx of population is high, its resident population of 76,900 at 30 June 1970 ranked only eighth among metropolitan municipalities. For electoral purposes it is divided into eleven wards and each ward returns three members, giving a full council of thirty-three members. Elections are held annually and one member from each ward retires in rotation, a member thus holding office for three years.

Melbourne is distinctively a garden city. Of its total area of 7,765 acres no less than 2,079 acres are parklands and reserves. On those parklands and reserves under its control, the City Corporation annually expends more than \$1.8m.

The Corporation both generates and reticulates electricity. In this respect, it is completely integrated into the State electricity grid. In its power station at Lonsdale Street it is able to generate, at a maximum, 90,000kW. It is expected, as the generating capacity of the State Electricity Commission increases, that the Council's power generation will decrease until the power station is closed down and held as reserve capacity.

The detailed work of the Council at councillor level is achieved by the division of its powers and responsibilities among a number of committees. The permanent or standing committees number eight, while special committees are constituted from time to time for specific purposes. No councillor may be chairman of more than one permanent committee or serve on more than three committees. The committees are the workshops of the Council, but the Local Government Act does not allow even partial delegation of authority, and all the work of the committees must be reported back to the Council and all decisions approved. Despite this, the organisation is effective and achieves all the desirable advantages which spring from the division of labour.

Of the eight permanent committees, two, Finance and General Purposes, are primarily co-ordinating, while the others are functional in their purpose. The authorities delegated to committees are made mutually exclusive and cover the full field of the Council's activities.

Administrative organisation

The work force is organised on a departmental basis, but no precise pattern of organisation has emerged. Broadly, the departments are either organised by major process or by purpose, but, in some cases, a hybrid of these two forms has been brought about. There are ten departments comprised of the Town Clerk's, Electric Supply, City Engineer's, Parks, Gardens and Recreations, City Treasurer's, City Architect's, Building Surveyor's, City Valuer's, Abattoirs and Markets (cattle, fruit, vegetable, and fish), and Health and Social Services. The Town Clerk's Department handles liaison work which achieves the necessary co-ordination and integration both of the deliberative body as organised by committees and the administrative staff as organised by departments, and of the departments themselves. For the effective functioning of the committees and for purposes of staff review and control, departments are married to committees, but this does not mean the committee has exclusive access to the activities of that particular department. Obviously departments, particularly when organised by major activity, are there to provide service to any committee requiring it. This underlines the need for a general co-ordinating staff as

exemplified by the Town Clerk's Department. At present the dovetailing of committees and departments is as follows :

Public Works and Traffic Committee	City Engineer's Department
Health and Social Services Committee	Health Department
Finance Committee	City Treasurer's Department
	City Valuer's Department
Electric Supply Committee	Electric Supply Department
General Purposes Committee	Town Clerk's Department
	City Architect's Department
Abattoirs and Markets Committee	Abattoirs (a) and Markets (cattle, fruit, vegetables, and fish) Department
Parks, Gardens, and Recreations Committee	Parks, Gardens, and Recreations Department
Building and Town Planning Committee	Building Surveyor's Department

(a) Abattoirs leased to private enterprise in 1969.

Further references, 1961 to 1971

Financing of major works

Since 1954 the Melbourne City Council has undertaken capital works for the community to the extent of \$61.7m. This commitment has extended the resources of the Council. New loan money has been about \$2m per annum, so that other internal funds have had to be fully utilised. Loan moneys are obtained by private treaty rather than by public subscription and are repayable over thirty years, usually by means of a 1.5 per cent cumulative sinking fund. At 30 September 1970 the Council's loan indebtedness amounted to \$52.3m offset by a sinking fund of \$8.3m.

In essence, the Australian Loan Council, through the State Treasury, exercises control over the extent of the Council's loan raising and, therefore, controls the rate of growth of the municipality. This is done by yearly allocation. In an endeavour to bring the concept of long term planning into the capital works programme, the Council's works schedule is prepared on a three year basis, necessitating the preparation of a capital budget for the period. This involves assessment of proposed projects, the allocation of priorities to them, and a determination of financial resources, i.e., what funds will be available from what sources. Control over the programme is exercised by the Council's Finance Committee, which places a limit over each Committee's loan expenditure for each year of the three year period, such limit being reviewed annually in the light of changing circumstances, particularly the amount of the allocation by the Loan Council. The Council's capital works programme for the year 1970-71 covered an expenditure of \$4.9m in addition to the above total figures.

Among the major works undertaken by the Council in recent years was the new Melbourne Wholesale Fruit and Vegetable Market. Standing on a 54 acre site in Footscray Road, West Melbourne, the market replaces

the present 16.5 acre Victoria Market site in North Melbourne. When officially opened on 1 December 1969 the new market had cost \$11m. A further project of major dimensions is the development of the civic square on the block bounded by Swanston Street, Collins Street, Regent Place, and Flinders Lane, to provide an uninterrupted vista between the Town Hall and St Paul's Cathedral as well as a "breathing space" in the heart of the City. This will cost over \$8.3m when all properties have been purchased.

The problems of traffic have also involved the Council in heavy expenditure. Since 1954 a sum of \$16m has been spent on roads, bridges, and traffic control devices. The Dynon Bridge, adjacent to the North Melbourne Railway Station, was completed in 1968 at a cost of approximately \$2m. In addition, work has been undertaken in conjunction with the Country Roads Board in the duplication of Footscray Road at a cost to 1971 of \$340,000 and also, in conjunction with the Country Roads Board and the Footscray City Council, the rebuilding and duplication of Hopetoun Bridge over the Maribyrnong River at Dynon Road, Council's contribution to 1971 being \$248,000.

Off-street car parking has also been a major item of investment, with a total expenditure to 1971 of approximately \$4m on the purchase of suitable sites. Council has provided, in association with private enterprise, off-street parking space for nearly 15,000 private vehicles in the central city area alone. Several sites on the fringe of this area have been reserved for future development and \$69,000 has been spent on the acquisition of properties to provide for off-street parking for the shopping area in Lygon Street, Carlton.

A town planning project currently being undertaken is the widening of Flinders Lane between Spencer and William Streets. Following the construction of the Flinders Street overpass, which reduced Flinders Street, for the length of the overpass, to the status of a rear access lane, the Council resolved to redevelop the area bounded by Spencer, Flinders, William, and Collins Streets, by constructing an alternative thoroughfare of such width as would provide an attractive frontage for development. The estimated cost of this project is \$1.8m. Altogether some \$6.5m has been expended on town planning.

For health, social services, and recreational needs, approximately \$4m has been spent. This covers establishment of baby health centres, crèches, kindergartens, playgrounds, elderly citizen's clubs, libraries, community recreation centres, and playing arenas for almost all types of organised sport.

Improvements and developments in the supply and reticulation of electrical power has cost about \$24.4m since 1954.

Redevelopment of Queen Victoria Market site

The decision by the City Council to re-establish the main Victorian centre for the wholesaling of fruit and vegetables at a new site off Footscray Road, West Melbourne, enabled redevelopment to be planned for the old wholesale market site known as the Queen Victoria Market. This area of some sixteen acres has been used for market purposes for many years and its location on the north-western fringe of the Central Business District made it a most appropriate and desirable area for redevelopment.

Because the old market site is primarily Crown land it was necessary for the Council to co-operate closely with the Victorian State Government in future planning. However, when given an undertaking by the State Government that the Council would be made responsible for the administration of the redeveloped area, the Council, in December 1968, decided that a feasibility study should be undertaken to determine the most appropriate forms of redevelopment. A consortium of leading town planners, real estate managers, and architects was commissioned by Council to undertake this project and a special committee of the Council was appointed to direct and further the study.

The programme of work laid down by the Council was designed to establish a comprehensive plan for the redevelopment of the Victoria Market site and adjacent areas which would enable the Council to invite competitive submissions for the development of buildings, having a variety of uses, together with other related facilities. The stages of work undertaken by the consultants in order to develop a concept included a statement on the role of the central sector and, in particular, the City of Melbourne, within the metropolitan context; a review of present growth patterns for the City of Melbourne and consideration of policies for future growth as they affect the Victoria Market site; consideration of the present pattern of influence of the Victoria Markets (wholesale and retail) upon the surrounding area leading to a determination of the boundaries within which the study should be carried out; studies of existing conditions within the boundaries of the planning area; consideration of State civic and community uses for the City of Melbourne which might appropriately be included in the Victoria Market site; consideration of possible future private uses for establishment in the planning area together with the determination of design criteria for these uses; examination of alternative combinations of uses in differing proportions and the application of transport, economic, and environmental tests; a study of tendering and leasing procedures; a determination of the recommended design concept; and a statement of guide lines for development tendering including recommendations of staging the development and the basis of tendering.

The results of this intensive study were presented to the Council in the form of a report recommending three concepts for an expanded area of 22 acres. Although similar in character each concept contained different elements and in total covered the whole field of land utilisation and development. Even though it has indicated a preference for one particular concept, the Council has felt that its approach should be flexible because of the magnitude and long term nature of the project. The Council has therefore established guide lines for the development and authorised an expert redevelopment committee to determine matters of detail. The concept favoured by the Council provides for the utilisation of a total floor space of 5,897,170 sq ft on a net site area of 964,000 sq ft. The development has an estimated value in excess of \$100m and includes prestige offices, general offices, a convention centre, a major hotel, a hotel/motel, apartments, town houses, a retail "spine" building, and car parks for 5,600 vehicles. In addition extensive open space will be built into the plan which has an estimated plot ratio of 6 : 1.

The potential of the area and its unquestionable effect on the City required planning to be on the broadest terms possible and the depth of the study undertaken is evidence of the importance of this project to the future of Melbourne.

STATISTICS OF LOCAL GOVERNMENT

Municipal finance statistics are compiled from statements of accounts and returns furnished by the local councils.

In tables for the year 1968–69 which follow, municipalities have been divided into City of Melbourne, other municipalities in the Melbourne Statistical Division, and municipalities outside the Melbourne Statistical Division.

The municipal areas which comprise the Melbourne Statistical Division are set out on pages 124–5 of this *Year Book*. Three of these areas are parts only of the Shires of Berwick, Cranbourne, and Healesville, but because it is not practicable to dissect the finances of municipalities for statistical purposes, the whole of each of these shires has been treated in the tables which follow as being within the Melbourne Statistical Division.

At 30 September 1969, in municipalities throughout the State, there were 2,325 councillors, namely, 33 in the City of Melbourne, 648 in 54 other municipalities in the Melbourne Statistical Division, and 1,644 in 155 municipalities in the remaining Statistical Divisions.

Properties rated, loans outstanding, etc.

In the following table the number of properties rated, the value of rateable property, receipts and expenditure of all funds, and the amount of loans outstanding, are shown for each of the years 1964–65 to 1968–69:

VICTORIA—LOCAL GOVERNMENT AUTHORITIES: PROPERTIES RATED, LOANS OUTSTANDING, ETC.

Year ended 30 September—	Number of properties rated	Value of rateable property		Receipts all funds	Expenditure all funds	Loans out- standing
		Net annual value	Estimated capital improved value			
	'000	\$'000	\$'000	\$'000	\$'000	\$'000
1965	1,290	559,247	10,995,815	227,146	225,849	156,012
1966	1,306	593,250	11,716,929	235,206	240,932	169,060
1967	1,344	634,352	12,373,547	262,161	256,839	189,147
1968	1,383	673,662	13,141,234	278,893	274,182	206,080
1969	1,400	791,141	14,929,094	289,451	292,630	219,435

Municipal revenue and expenditure

The following table shows for each of the years ended 30 September 1965 to 1969 the general revenue and expenditure of municipalities in Victoria on account of ordinary services, together with similar details for the business undertakings under municipal control:

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES : ORDINARY SERVICES
AND BUSINESS UNDERTAKINGS : REVENUE AND EXPENDITURE
(\$'000)**

Year ended 30 September—	Ordinary services		Business undertakings	
	Revenue	Expenditure	Revenue	Expenditure
1965	102,995	103,187	45,352	45,117
1966	110,726	112,661	47,604	47,962
1967	124,354	124,307	50,884	50,963
1968	137,922	135,645	55,251	54,739
1969	143,104	142,771	58,262	57,963

General Account

The ordinary revenue of a municipality, consisting of rates, government grants, etc., is payable into the General Account, and this account is applied toward the payment of all expenses incurred in respect of administration, debt services, ordinary municipal services, etc.

Details of the principal items of revenue received during the year ended 30 September 1969 are given below :

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES :
ORDINARY SERVICES : REVENUE, 1968–69
(\$'000)**

Particulars	Municipalities in Melbourne Statistical Division(a)		Municipali- ties outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
Taxation—				
Rates (net)	7,279	56,309	30,057	93,646
Penalties	21	364	129	514
Licences—				
Dog	4	257	130	391
Other	24	158	58	240
Total taxation	7,328	57,088	30,374	94,790
Public works and services—				
Roads, streets, bridges, drains	171	2,172	1,603	3,947
Council properties, sundry income—				
Parks, gardens, baths, and other recreational facilities	182	1,228	1,069	2,478
Markets	1,092	368	552	2,012
Halls	57	414	345	815
Libraries	4	83	73	161
Plant operating (surplus)	2	1,308	3,214	4,523
Rents, n.e.i.	727	312	322	1,361
Other	47	513	871	1,431
Council properties, sale of capital assets—				
Plant, furniture, etc.	..	201	231	432
Land and buildings, etc.	..	610	256	865
Health and welfare—				
Sanitary and garbage	155	2,782	1,206	4,143
Other	112	905	409	1,425

(a) See definition on page 235.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :
ORDINARY SERVICES : REVENUE, 1968-69—*continued*
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division(a)		Municipali- ties outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
Other works and services—				
Car parking fees and fines	1,576	539	644	2,759
Building fees	86	957	196	1,239
Supervision of private streets	..	1,101	93	1,194
Other	28	1,409	275	1,712
Total public works and services	4,240	14,900	11,357	30,496
Government grants—				
Roads, etc.	10	234	555	798
Parks, gardens, etc.	..	115	848	963
Infant welfare	35	512	267	815
Pre-school	61	246	200	507
Home help	30	534	159	723
Libraries	30	746	435	1,212
Other	28	420	932	1,379
Total government grants	194	2,807	3,395	6,397
Transfers from business undertakings	90	642	116	849
Transfers from other council funds	1,655	3,321	1,615	6,591
Oncost (C.R.B., private streets, etc.)	1	919	1,107	2,027
Fines and costs (police court)	5	226	46	277
Interest on investments	122	483	147	752
Other revenue	68	508	348	924
Total revenue	13,703	80,895	48,506	143,104

(a) See definition on page 235.

After exclusion of \$6,591,000 transferred from other funds, the net General Account income during 1968-69 was \$136,512,000. Of this total 69.4 per cent was derived from taxation (69.0 per cent from rates and penalties, and 0.4 per cent from licences); 22.3 per cent from public works and services; 0.6 per cent from transfers from business undertakings; 4.7 per cent from government grants; and 3.0 per cent from other sources. The total amount collected from taxation (\$94,790,000) was equivalent to \$28.12 per head of population.

Excluding \$6,581,000 transferred to other funds, the net General Account expenditure during 1968-69 was \$136,190,000. Of this total 17.6 per cent was for administration; 13.8 per cent for debt charges; 11.1 per cent for health services; 15.0 per cent for maintenance and operating expenses of parks, gardens, and other council properties; 7.2 per cent for capital expenditure on council properties; 28.4 per cent for roads, streets, etc.; 4.2 per cent for other public works and services; 2.3 per cent for grants and contributions; 0.4 per cent for miscellaneous items.

Details of the principal items of expenditure from the General Account during the year ended 30 September 1969 follow:

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES :
ORDINARY SERVICES : EXPENDITURE, 1968-69
(\$'000)**

Particulars	Municipalities in Melbourne Statistical Division(a)		Municipalities outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
General administration	2,151	12,884	8,875	23,909
Debt charges (excluding business undertakings)—				
Interest—				
Loans	2,365	4,091	2,138	8,594
Overdraft	27	169	249	445
Redemption	329	4,911	3,394	8,634
Sinking fund	458	418	99	975
Other	1	62	25	88
Total debt charges	3,180	9,651	5,905	18,736
Public works and services—				
Roads, streets, bridges, drains—				
Construction and maintenance	868	12,864	11,582	25,314
C.R.B. (main roads maintenance)	(b)	699	1,032	1,731
C.R.B. (other works)	..	718	2,490	3,208
Cleaning and watering	549	2,507	534	3,590
Other	450	1,337	246	2,034
Street lighting	(c)	2,257	584	2,841
Council properties (maintenance and operating expenses)—				
Parks, gardens, baths, and other recreational facilities	1,294	5,643	3,109	10,046
Markets	533	176	320	1,028
Halls	285	1,393	714	2,392
Libraries	136	2,392	1,018	3,546
Plant operating (deficit)	..	110	14	124
Other	360	1,460	1,514	3,334
Council properties—capital expenditure—				
Plant, furniture, etc., purchase	85	1,971	1,645	3,701
Land and buildings purchase	44	1,301	274	1,619
Buildings—capital works	8	1,927	886	2,821
Other capital works	(b)	1,274	440	1,714
Health and welfare—				
Sanitary and garbage services	364	5,685	1,775	7,824
Infant welfare (maintenance)	101	1,233	609	1,943
Pre-school (maintenance)	146	378	209	733
Home help	58	1,262	314	1,634
Elderly citizens	18	360	116	494
Other	269	1,549	640	2,458
Other works and services—				
Car parking	684	786	340	1,810
Building inspection	38	815	158	1,011
Supervision of private streets	..	590	21	612
Dog Act expenses	8	155	103	266
Other	10	1,532	501	2,043
Total public works and services	6,308	52,373	31,186	89,867

(a) See definition on page 235.

(b) Under \$500.

(c) Cost of street lighting is charged to electricity undertaking.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES :
ORDINARY SERVICES : EXPENDITURE, 1968-69—continued
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division(a)		Municipalities outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
Grants—				
Metropolitan Fire Brigades Board	244	1,902		2,146
Hospitals and other charities	35	169	150	354
Other	258	250	88	597
Total grants	537	2,322	238	3,097
Transfers to other council funds	1,328	2,977	2,275	6,581
Miscellaneous	34	308	239	581
Total expenditure	13,538	80,515	48,718	142,771

(a) See definition on page 235.

Municipal administrative costs

Particulars of the principal items of expenditure during each of the years ended 30 September 1965 to 1969, in respect of general municipal administration, are given in the following table :

VICTORIA—COST OF MUNICIPAL ADMINISTRATION
(\$'000)

Particulars	Year ended 30 September—				
	1965	1966	1967	1968	1969
Salaries(a)	10,021	11,773	12,747	13,319	15,074
Mayoral and presidential allowances	271	289	317	341	349
Audit expenses	111	120	129	153	159
Election expenses	113	107	112	127	123
Legal expenses	311	316	356	426	279
Printing, advertising, postage, telephone, etc.	1,539	1,772	1,837	2,070	2,160
Insurances, n.e.i.	1,289	1,750	1,836	1,943	1,923
Pay-roll tax, n.e.i.	906	993	1,108	1,186	1,225
Superannuation, n.e.i.	1,036	1,188	1,391	1,444	1,608
Long service leave, n.e.i.	(b)	(b)	(b)	(b)	729
Other	346	509	632	815	281
Total	15,941	18,816	20,465	21,826	23,909

(a) Including cost of valuations and travelling expenses, but excluding health officers' salaries which are included under "Health and welfare—other" on previous page.

(b) Included in "Other".

Municipal business undertakings

In Victoria during 1968-69 twelve municipal councils conducted electricity supply undertakings. These constituted the principal trading activities of municipalities. Other trading activities included water supply, abattoirs, quarries, iceworks, and reinforced concrete pipe and culvert

works, but, relatively, these were not extensive. A list of the principal local authorities which have assumed responsibility for water supply is to be found on page 253.

The tables which follow show, for the year ended 30 September 1969, revenue and expenditure of the various types of local authority business undertakings :

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES :
BUSINESS UNDERTAKINGS, 1968-69
(\$'000)**

Particulars	Municipalities in Melbourne Statistical Division(a)		Municipalities outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
REVENUE				
Water supply—				
Rates, sale of water, etc.	..	87	659	747
Electricity—				
Charges for services and sales of products, etc.	18,110	37,355	268	55,733
Abattoirs—				
Charges for services and sales of products, etc.	191	236	413	839
Other(b)—				
Charges for services and sales of products, etc.	..	370	573	943
Total revenue	18,302	38,048	1,913	58,262
EXPENDITURE				
Water supply—				
Working expenses	..	78	430	507
Depreciation	..	2	56	58
Debt charges	..	15	149	164
Other expenditure	..	..	8	8
Total water supply	..	95	642	737
Electricity—				
Working expenses	16,595	34,441	185	51,221
Depreciation	816	690	..	1,506
Debt charges	470	1,335	38	1,843
Other expenditure	90	548	47	685
Total electricity	17,972	37,013	270	55,255
Abattoirs—				
Working expenses	235	165	379	778
Depreciation	9	24	28	61
Debt charges	27	..	37	64
Other expenditure	..	116	28	143
Total abattoirs	271	305	472	1,047
Other(b)—				
Working expenses	..	279	460	739
Depreciation	..	5	36	41
Debt charges	..	..	32	32
Other expenditure	..	63	49	112
Total other	..	347	577	924
Total expenditure	18,242	37,760	1,961	57,963

(a) See definition on page 235.

(b) Includes quarries, iceworks, and reinforced concrete pipe and culvert works.

Municipal loan finance*Municipal loan receipts and expenditure*

The following tables show loan receipts and expenditure of municipalities exclusive of redemption loans and loans raised for works on private streets.

The first table shows total loan receipts and expenditure for each of the years 1964–65 to 1968–69, the second table details the loan raisings for ordinary services and business undertakings during the year ended 30 September 1969, and the third table details the principal items of expenditure from loan funds during the year.

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES: LOAN RECEIPTS,
LOAN EXPENDITURE**

(Excluding redemption loans and private street loans)
(\$'000)

Year ended 30 September—	Receipts				Expenditure			
	Loans for—		Other	Total	Ordinary services	Business under- takings	Other (non- works)	Total
	Ordinary services	Business under- takings						
1965	19,521	2,851	2,105	24,477	19,151	3,508	(a)	22,659
1966	18,879	1,842	2,352	23,073	21,468	3,570	199	25,237
1967	23,136	3,032	2,318	28,486	19,855	4,013	192	24,060
1968 (b)	20,405	2,691	1,792	24,887	21,158	3,940	217	25,315
1969 (b)	22,622	1,394	2,102	26,118	24,641	3,332	83	28,057

(a) Included with ordinary services.

(b) Excludes separate rate loans.

At 30 September 1969 there were unexpended balances in loan accounts amounting to \$16.5m.

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES:
LOAN RECEIPTS, 1968–69**

(Excluding redemption loans, private street, and separate rate loans)
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division (a)		Municipali- ties outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
Loan raisings for—				
Ordinary services	4,359	11,029	7,234	22,622
Business undertakings—				
Water supply	..	2	252	254
Electricity	..	1,140	..	1,140
Other receipts (Government grants, recoups, etc., to loan fund)	1,578	339	185	2,102
Total receipts	5,937	12,510	7,671	26,118

(a) See definition on page 235.

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES:
LOAN EXPENDITURE, 1968–69
(\$'000)**

Particulars	Municipalities in Melbourne Statistical Division (a)		Municipalities outside Melbourne Statistical Division	Total
	City of Melbourne	Other		
Ordinary services—				
Roads, streets, bridges, and drains	446	4,430	2,254	7,130
Property construction—				
Parks, gardens, baths, and other recreational facilities	42	1,809	901	2,752
Halls	..	1,317	1,161	2,479
Markets	5,326	..	109	5,435
Libraries	..	312	265	577
Other	..	247	369	616
Plant purchase	39	371	1,421	1,831
Land, buildings purchase	1,182	1,286	310	2,778
Health and welfare	163	356	128	647
Off-street parking	..	161	15	176
Other	..	46	175	221
Total ordinary services	7,197	10,336	7,108	24,641
Business undertakings—				
Water supply	..	81	233	314
Electricity	1,570	1,406	(b)	2,975
Abattoirs	..	..	36	36
Other	..	..	7	7
Total business undertakings	1,570	1,487	276	3,332
Other (non-works)	..	66	17	83
Total expenditure	8,767	11,889	7,401	28,057

(a) See definition on page 235.

(b) Under \$500.

Municipal loan liability

The loan liability of the municipalities in Victoria at the end of each of the five years 1964–65 to 1968–69 is given below. Liability of municipalities for private street construction and separate rate loans is included, but liability to the Country Roads Board is excluded.

VICTORIA—LOCAL GOVERNMENT AUTHORITIES: LOAN LIABILITY

At 30 September—	Due to—		Gross loan liability	Accumulated sinking funds	Net loan liability		Average rate of interest payable
	Government	Public			Amount	Per head of population	
	\$'000	\$'000	\$'000	\$'000	\$'000	\$	per cent
1965	5,601	150,412	156,012	8,765	147,247	46.34	5.26
1966	5,644	163,416	169,060	10,207	158,853	49.16	5.32
1967	5,705	183,442	189,147	11,836	177,311	53.97	5.39
1968	5,785	200,295	206,080	13,720	192,360	57.65	5.46
1969	5,854	213,581	219,435	13,604	205,830	60.56	5.53

Construction of private streets

The council of any municipality may construct roads or streets on private property, and may also construct, on land of the Crown or of any public body, means of back access to, or drainage from, property adjacent to such land. The cost of this work is recoverable from the owners of adjoining or neighbouring properties where, in the opinion of the council, the work performed accrues to the benefit of those properties. At the request of any owner, the amount apportioned as his total liability may be made payable by forty or, if the council so directs, sixty quarterly instalments, bearing interest on the portion that, from time to time, remains unpaid.

For the purpose of defraying the costs and expenses of work for which any person is liable to pay by instalments, the council may, on the credit of the municipality obtain advances from a bank by overdraft on current account, or borrow money by the issue of debentures, but such borrowings shall not exceed the total amount of instalments payable.

The following table details the receipts and expenditure, etc., for the year ended 30 September 1969, of the Private Street Account for areas outside that controlled by the Melbourne City Council (which has no such account) :

VICTORIA—LOCAL GOVERNMENT AUTHORITIES: PRIVATE STREET
ACCOUNT: RECEIPTS, EXPENDITURE, ETC., 1968-69
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division (a)	Municipalities outside Melbourne Statistical Division	Total
Receipts—			
Loans	3,494	300	3,794
Bank overdraft (increase)	1,414	336	1,749
Owners' contributions	16,731	2,015	18,746
Other	563	109	672
Total	22,202	2,760	24,962
Expenditure—			
Works	15,508	1,946	17,454
Bank overdraft (decrease)	2,138	226	2,365
Debt charges—			
Interest—			
Loans	1,443	146	1,589
Overdraft	411	49	460
Redemption	2,693	343	3,036
Sinking fund	403	8	411
Other	17	..	17
Other	1,812	196	2,008
Total	24,426	2,913	27,338
Cash in hand or in bank at 30 September 1969	5,206	534	5,740
Bank overdraft at 30 September 1969	9,488	1,761	11,248
Loan liability at 30 September 1969	25,092	2,213	27,305

(a) See definition on page 235.

Details of receipts and expenditure of the Private Street Account including the net increase or decrease in bank overdraft, during each of the years 1964-65 to 1968-69 are shown in the following table :

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES: PRIVATE STREET
ACCOUNT: RECEIPTS, EXPENDITURE, ETC.**

(\$'000)

Particulars	Year ended 30 September—				
	1965	1966	1967	1968	1969
Receipts—					
Loans	2,901	2,812	5,562	5,633	3,794
Bank overdraft (increase)	2,371	2,130	624	..	..
Owners' contributions	16,025	17,235	17,237	18,452	18,746
Other	514	652	664	827	672
Total	21,811	22,829	24,087	24,913	23,212
Expenditure—					
Works	17,935	19,514	17,370	15,189	17,454
Bank overdraft (decrease)	..	..	..	758	615
Debt charges—					
Interest—					
Loans	1,112	1,207	1,182	1,339	1,589
Overdraft	125	365	618	662	460
Redemption	1,894	2,123	2,426	2,805	3,036
Sinking fund	166	138	176	249	411
Other	..	(a)	4	8	17
Other	1,144	749	1,383	1,549	2,008
Total	22,377	24,097	23,159	22,559	25,589
Loan liability at 30 September	19,950	20,626	23,762	26,597	27,305

(a) Under \$500.

Country Roads Board Account

Works on main roads and unclassified roads carried out by municipalities on behalf of the Country Roads Board are financed by means of a separate municipal bank account. Expenditure is made initially from overdraft, claims subsequently being made on the Board for recovery of funds expended. With the exception of any disallowances by the Board, the full amount expended on main roads is recoverable from the Board and credited to the Country Roads Board Account, with the council later making an annual payment from General Revenue to the Country Roads Board for the council's share of the cost. The Country Roads Board assists municipal councils financially to carry out construction and maintenance works on approximately 20,000 miles of unclassified roads each year. Funds expended by councils on these roads, after deduction of councils' proportion of the cost (which is charged to General Account), are also recoverable from the Country Roads Board. Direct payments by the Country Roads Board itself on works, or for supply of materials, etc., for works, are included on both sides of the Country Roads Board Account so that the full amount of the expenditure on relevant roads may be shown in the Account for the year concerned. Any expenditure by a council on State highways, freeways, tourists roads, and forest roads, is charged to the Country Roads Board Account and is fully recoverable from the Country Roads Board.

The following table summarises the receipts and expenditure of the Country Roads Board Account of Victorian municipalities for the year ended 30 September 1969 :

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES: COUNTRY ROADS
BOARD ACCOUNT, 1968-69**
(\$'000)

Particulars	Municipalities in Melbourne Statistical Division (a)	Municipalities outside Melbourne Statistical Division	Total
Receipts—			
Refunds from Country Roads Board	8,619	15,239	23,858
Direct payment by Country Roads Board	1,265	4,765	6,029
Council's proportion of works on unclassified roads	1,452	2,345	3,796
Bank overdraft (increase)	485	793	1,278
Other	19	24	44
Total	11,840	23,165	35,005
Expenditure—			
Main roads	6,649	10,112	16,761
Unclassified roads	4,608	12,286	16,894
Other roads (State highways, etc.)	150	486	636
Bank overdraft (decrease)	354	238	593
Other	79	42	121
Total	11,840	23,165	35,005
Bank overdraft at 30 September 1969	1,052	1,946	2,998

(a) See definition on page 235.

Details of receipts and expenditure of the Country Roads Board Account including the net increase or decrease in bank overdraft, during each of the years 1964-65 to 1968-69 are shown in the following table :

**VICTORIA—LOCAL GOVERNMENT AUTHORITIES: COUNTRY ROADS
BOARD ACCOUNT**
(\$'000)

Particulars	Year ended 30 September—				
	1965	1966	1967	1968	1969
Receipts—					
Refunds from Country Roads Board	20,620	20,345	22,526	23,105	23,858
Direct payment by Country Roads Board	6,523	5,765	5,652	6,556	6,029
Council's proportion of works on unclassified roads	3,397	3,428	3,589	3,928	3,796
Bank overdraft (increase)	468	..	648	..	686
Other	35	44	22	71	44
Total	31,044	29,583	32,436	33,659	34,413
Expenditure—					
Main roads	14,893	14,294	15,382	16,098	16,761
Unclassified roads	14,828	13,827	16,225	16,837	16,894
Other roads (State highways, etc.)	1,220	1,060	702	629	636
Bank overdraft (decrease)	..	265	..	38	..
Other	103	136	127	56	121
Total	31,044	29,583	32,436	33,659	34,413
Bank overdraft at 30 September	1,999	1,733	2,382	2,344	2,998

Length of roads and streets

The following table shows the estimated length of all roads and streets open for general traffic in the State in 1970. The mileages were supplied by the Country Roads Board, the Melbourne and Metropolitan Board of Works, municipal councils, and other authorities.

VICTORIA—LENGTH OF ALL ROADS AND STREETS OPEN FOR
GENERAL TRAFFIC AT 30 JUNE 1970
(miles)

Type of road or street	State highways, freeways (a)	Main roads	Tourists roads, forest roads	Other roads and streets	Total
Bituminous seal	4,329	8,248	552	18,078	31,207
Cement, concrete, etc.	3	2	..	209	214
Water-bound macadam, gravel, sand, and hard loam pavements	182	788	509	27,278	28,757
Formed, but not otherwise paved	..	28	..	20,676	20,704
Not formed but open for general traffic	..	..	..	20,170	20,170
Total	4,514	9,066	1,061	86,411	101,052

(a) Includes 74 miles of freeways consisting of 66 miles of extra-metropolitan freeways (by-pass roads) and 8 miles of metropolitan freeways.

SEMI-GOVERNMENTAL AUTHORITIES*

Country Roads Board

There are about 101,000 miles of public roads in Victoria of which some 14,600 miles comprise the State's principal system of Country Roads Board declared roads. Under the provisions of the Country Roads Act the Board may, subject to the confirmation of the Governor in Council, declare any road to be a State highway, a freeway, or a main road. The Board also has power to recommend to the Governor in Council that any road be proclaimed as a tourists road or a forest road.

The Board meets the full cost of works required to cater for the needs of through traffic on State highways, freeways, tourists roads, and forest roads. State highways and freeways, while serving the immediate district through which they pass as arterial routes, also carry much long distance traffic. Tourists roads and forest roads generally pass through areas where little or no rate revenue is available to the local municipality. Main roads, the construction and maintenance costs of which are partly borne by local municipal councils, form what may be described as a secondary system of important roads in the State. In addition, there is a vast network of unclassified roads, many of which carry considerable traffic and which, within the limits of available finance, are subsidised by the Board as needs and priorities warrant.

The Board's system of classified or declared roads as at 30 June 1970 comprised 4,440 miles of State highways, 66 miles of freeways, 483 miles of tourists roads, 578 miles of forest roads, and 9,066 miles of main roads.

* This section includes only those semi-governmental authorities having close associations with local government.

Freeways

A freeway is a road offering the highest standards of safety and traffic capacity. A distinguishing feature of freeways is that access is controlled and restricted to properly designed interchanges. Traffic crossing a freeway is taken directly over or under the through carriageways.

The construction of strategically located freeways in both urban and rural areas is a vital requirement in the achievement of an efficient road system. In rural areas freeways allow through traffic to by-pass centres of population and in urban areas specially designed interchanges connecting with the surface street system permit fast and safe travel through populated areas. Quicker movement of goods reduces rising freight costs and commercial areas free from the dangers of heavy volumes of through traffic grow stronger and more efficient.

In Victoria freeways are a comparatively new form of road construction and up to 30 June 1970, 66 miles of freeways had been completed. In addition, construction plans were completed for 24.5 miles of new freeways and detailed planning was proceeding for a further 31.6 miles. On 3 February 1970 the Premier of Victoria officially opened the 11 mile long Tullamarine Freeway. The Country Roads Board constructed the 2 mile long east-west Strathmore section from Bell Street, Pascoe Vale South, to the southern boundary of the Essendon Airport and the 5 mile long north-south section from Essendon Airport to Melbourne (Tullamarine) Airport at a total cost of \$14.94m. The freeway provides a fast and safe route, of the most modern design standards, connecting the city area with the Melbourne (Tullamarine) Airport and a much needed east-west crossing over the Moonee Ponds Creek and the railway line between the north-eastern and north-western suburbs of Melbourne. Provision has also been made for additional lanes to be constructed in the future.

The project included the Bell Street interchange and the construction of thirteen other bridges. The 3.5 mile section from Flemington Bridge to the Bell Street interchange was built by the Melbourne and Metropolitan Board of Works. The Bell Street interchange is a relatively complex feature providing for the connection of both Bell Street and Pascoe Vale Road to the freeway and to each other. This interchange contains six bridges of a combined length of half a mile. The longest bridge is 650 ft in length and carries the west-bound traffic over both freeway carriageways and a railway line. There are also two 250 ft long bridges with 70 ft spans which carry the freeway carriageways and the collector-distributor roads over Pascoe Vale Road.

Other freeways completed by the Board by 1970 were the sections of the Hume Freeway at Tallarook, Beveridge, Chiltern, and Barnawartha and of the Princes Freeway at Moe and Werribee.

The Western Freeway is being constructed in several sections and when completed will join the east of Bacchus Marsh to the east of Ballarat—a distance of 35 miles. The Bacchus Marsh section will by-pass the township of Bacchus Marsh to the north, leaving the existing Western Highway at Coimadai Creek and rejoining it at Korkuperrimul Creek. The northern by-pass of Gordon township will eliminate a poorly aligned section of the highway and reduce the present route by almost 1 mile. The

remaining sections are the Pentland Hills section, the two by-passes of the townships Myrniong and Ballan, and the Wallace-Bungaree section which will eliminate two railway level crossings.

In 1963 the Board constructed a single carriageway by-pass of Frankston joining Wells Road with the Frankston-Flinders Road. Work commenced in 1970 on the provision of a second carriageway and grade separation with the Dandenong-Frankston Road. When completed in 1973 the Frankston Freeway will provide 4.5 miles of dual carriageway freeway between Eel Race Road, Seaford, and the Frankston-Flinders Road. Work also commenced in 1970 on the five mile long Dromana section of the Mornington Peninsula Freeway. The Mornington Peninsula Freeway will extend 43 miles from the vicinity of the Dingley Freeway to Canterbury Jetty Road, south of Sorrento. It will provide a fast and safe link between Melbourne and bayside holiday resorts as well as alleviating much traffic congestion, especially during the summer months.

The Mulgrave Freeway will cover 13.5 miles from Waverley Road, Chadstone to the Princes Highway at Hallam. The construction of 3.9 miles of dual carriageways of the Mulgrave Freeway and the Eumemmerring Freeway between Stud Road, Dandenong North and the Princes Highway commenced in 1970. The Eumemmerring Freeway will provide a north-south connection between the Mulgrave Freeway and the South Gippsland Highway. The Lower Yarra Freeway, consisting of four miles of freeway between the Princes Highway and Williamstown Road, will provide the main western approach to the West Gate Bridge.

Other freeways which were investigated in 1970 included the Scoresby Freeway (13 miles) to connect the bayside suburbs with the eastern suburbs; the Healesville Freeway to provide an important link from Melbourne to the east; the Dingley Freeway (12 miles) to connect South Road, Moorabbin, and other important arterial roads with the Mornington Peninsula Freeway and the proposed Scoresby and Latrobe Valley Freeways; the Hume Highway (Wallan to Broadford section) to cross the Great Dividing Range to the east of the present Hume Highway and Pretty Sally Hill at an elevation 400 ft lower than at present; the Latrobe Valley Freeway to by-pass Drouin and Warragul; the connection of the Tullamarine Freeway and the Calder Highway; and the construction of Freeway F2 through the northern suburbs to Craigieburn to alleviate traffic congestion in this corridor.

Highways

Under legislation passed in 1924, a "State highway" in Victoria has a specific meaning. It is a road declared as such by the Board with the confirmation of the Governor in Council. State highways are the principal road arteries forming interstate connections and links between important provincial centres. The more important State highways also form part of the national route system of interstate highways. At 30 June 1970 there

were 4,440 miles of State highways, 4,258 miles of which have a sealed surface.

State highways providing links between interstate centres are the Princes Highway, Hume Highway, Western Highway, and Sturt Highway. The Princes Highway, National Route 1, runs from the South Australian border to New South Wales passing through Warrnambool, Geelong, Melbourne, Warragul, Sale, Bairnsdale, and Orbost. Melbourne is linked with Sydney by the Hume Highway which runs through Seymour, Wangaratta, and Wodonga. The Western Highway provides another route between Melbourne and Adelaide and passes through Ballarat, Horsham, and Nhill, while the Sturt Highway crosses the north-west corner of Victoria on the direct route from Sydney to Adelaide via Mildura.

The Calder Highway, named after the first Chairman of the Board, joins Melbourne with the important provincial centres of Bendigo and Mildura. Important agricultural settlements are joined by the Murray Valley Highway which runs from Corryong in north-eastern Victoria to Hattah in the north-west; while the picturesque Omeo Highway passes through the mountainous country from Tallangatta in the north-east to Bairnsdale in the south-east.

Tourists roads

The *Tourists' Roads Act* 1936 empowered the Board to carry out permanent works on and maintain tourists roads which are proclaimed as such by the Governor in Council. Of the 483 miles of tourists roads, the best known is the Ocean Road between Torquay and Peterborough. The Ocean Road was proclaimed in 1936 and is believed to be the only memorial road in Australia. It was built by the Board for the Great Ocean Road Trust to give employment to returned soldiers and sailors and as a memorial to their fallen comrades.

Other tourists roads have been built to provide access to places of interest such as the Grampians and the various alpine ski resorts at Mount Hotham, Mount Buffalo, Mount Buller, and Falls Creek.

Forest roads

Forest roads are proclaimed or constructed in those areas of the State within or adjacent to any State forest area or those which the Board considers to be timbered, mountainous, or undeveloped areas. Under the *Forest Roads and Stock Routes Act* 1943, municipalities are relieved of all costs of construction and maintenance of such roads. At 30 June 1970 there were 578 miles of forest roads.

In 1969 the Board completed the link between Jamieson and Licola with the construction of 10.6 miles of new road. The road between Jamieson and Heyfield was then proclaimed the Heyfield-Jamieson forest road and it provides an additional link between Gippsland and northern Victoria for tourist, logging, and commercial traffic.

Main roads

The Board is empowered under the Country Roads Act to declare as a main road any road which in its opinion is of sufficient importance. Main roads are generally roads linking centres of industry, commerce, or settlement. At 30 June 1970 there were 9,066 miles of main roads.

At 30 June 1970 the mileage of declared roads in each classification, and the mileage with bituminous surface were as follows :

VICTORIA—MILEAGE OF DECLARED ROADS
AT 30 JUNE 1970

Classification	Mileage	Mileage sealed
State highways	4,440	4,258
Freeways	66	66
Tourists roads	483	306
Forest roads	578	246
Main roads	9,066	8,250
Total	14,632	13,126

Roadside development

Roads are among the most permanent structures, and once built they cannot be considered apart from their surroundings. In recent years the Board has furthered the development of what is termed the complete highway to provide a balanced combination of safety, utility, economy, and beauty. Such factors as the preservation of flora, conservation of landscape features, rehabilitation of cleared areas, and erosion control are important aspects of the Board's road design practices. Some 60,000 trees and shrubs are planted annually on declared road reserves. The Board is also developing roadside stopping places for motorists' convenience. They include rest areas with water and toilet facilities, wayside stops, scenic view points, and parking areas.

Finance

To enable the Board to carry out its responsibilities, two main sources of finance are available : State and Commonwealth funds.

Funds derived from State sources are :

1. Motor registration fees less cost of collection. (Metropolitan bus registration fees and the specified proportion of registration fees paid to the Roads (Special Projects) Fund of which the Board derives a share are not included here—see item 9 below.)
2. Two thirds of additional motor registration fees levied on first registration and subsequent change of ownership.
3. Trailer registration fees less cost of collection other than the amount paid to the Roads (Special Projects) Fund.
4. One eighth drivers' licence fees, less cost of collection.

5. Drivers' licence testing fees, less cost of collection.
6. One quarter of driving instructors' licence fees, less cost of collection.
7. Examiners' licence fees—motor car roadworthiness examinations.
8. All fees from the issue of authorised log books, less cost of collection.
9. Receipts from the Roads (Special Projects) Fund.
10. All moneys received under Part II of the Commercial Goods Vehicles Act (ton mile tax).
11. Municipal contributions on account of main road works.
12. State Loan Fund money.

Moneys provided by the Commonwealth to Victoria under the provisions of the Commonwealth Aid Roads Act are paid to the Board. In 1969-70 total receipts from this source amounted to \$38.2m.

Total funds available to the Board in 1969-70, including unexpended balance brought forward from 1968-69 (\$3.0m), amounted to \$89.1m.

Receipts and expenditure

Receipts and expenditure covering the operations of the Board for each of the years 1965-66 to 1969-70 are as follows :

VICTORIA—COUNTRY ROADS BOARD : RECEIPTS AND EXPENDITURE (\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
RECEIPTS					
Fees—Motor Car Act (less cost of collection)	24,690	25,871	26,805	28,888	30,868
Municipalities contributions—Permanent works and maintenance—Main roads	1,691	1,824	1,845	1,931	1,904
Commonwealth Aid Roads Acts	27,175	29,050	30,895	32,723	38,160
Roads (Special Projects) Fund	1,654	3,311	2,652	3,055	3,533
Proceeds from Commercial Goods Vehicles Act	6,379	6,732	7,248	7,842	8,555
State loan funds	1,020	834	987	3,389	900
Grants under Public Works Loan Application Act	768	715	700	784	849
Other receipts	971	459	380	520	498
Total	64,348	68,796	71,513	79,132	85,267
EXPENDITURE					
Construction and maintenance of roads and bridges	53,076	57,503	61,078	64,776	73,678
Traffic line marking and traffic lights	238	252	240	270	319
Plant purchases	1,149	1,388	1,234	1,583	1,818
Interest and sinking fund payments	2,056	2,140	2,190	2,306	2,443
Payment to Tourist Fund	468	494	517	536	578
Payment to Transport Regulation Board	178	383	404	435	471
Payment to Traffic Commission Fund			30	271	289
General expenditure	6,113	5,416	6,750	7,275	7,519
Total	63,278	67,575	72,443	77,452	87,115

Expenditure on roads and bridges

The following is a summary of the total expenditure by the Country Roads Board on roads and bridges during each of the five years 1965-66 to 1969-70 :

**VICTORIA—COUNTRY ROADS BOARD : EXPENDITURE ON
ROADS AND BRIDGES
(\$'000)**

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
State highways—					
Construction	13,408	14,984	13,654	12,714	15,946
Maintenance	4,296	4,689	5,349	5,635	6,132
Freeways—					
Construction	3,690	5,059	7,840	11,570	13,288
Maintenance	55	112	129	113	151
Main roads—					
Construction	12,301	12,416	12,303	12,198	12,585
Maintenance	4,268	4,350	4,466	4,742	5,198
Unclassified roads—					
Construction	10,654	10,892	11,550	12,001	13,843
Maintenance	2,055	1,907	2,189	2,247	2,512
Tourists roads—					
Construction	911	1,753	2,430	2,229	2,509
Maintenance	599	559	427	564	603
Forest roads—					
Construction	408	442	424	423	507
Maintenance	291	295	234	255	291
River Murray bridges and punts—					
Maintenance	140	45	82	86	112
Total construction	41,372	45,547	48,202	51,134	58,678
Total maintenance	11,704	11,956	12,876	13,642	14,999
Total expenditure	53,076	57,503	61,078	64,776	73,678

Further references, 1962 to 1971

Water supply authorities

The principal authorities controlling water supply for domestic purposes in Victoria at 30 June 1970 are listed on page 253.

Information about the activities of the State Rivers and Water Supply Commission will be found on pages 288-96. The finances of the Commission (which form part of the Public Account and are subject to annual budget review) are included in the tables on pages 621, 622, and 641 in Part 9 of the *Year Book*.

VICTORIA—WATER SUPPLY AUTHORITIES

Authorities	Administered under the provisions of—
Melbourne and Metropolitan Board of Works	Melbourne and Metropolitan Board of Works Act
State Rivers and Water Supply Commission	} Water Act
Waterworks Trusts (181)	
Local governing bodies—	
Ballarat Water Commissioners	
Municipal councils—	
Ararat City	
Bacchus Marsh Shire	
Beechworth Shire	
Bet Bet Shire	
Camperdown Town	
Creswick Shire	
Korong Shire	
Kyabram Borough	
Stawell Town	
Talbot and Clunes Shire	
Walpeup Shire	
Warrnambool City	
Werribee Shire	
Sale City	
Geelong Waterworks and Sewerage Trust	Local Government Act
Latrobe Valley Water and Sewerage Board	Geelong Waterworks and Sewerage Act
First Mildura Irrigation Trust	Latrobe Valley Act
Mildura Urban Water Trust	} Mildura Irrigation and Water Trusts Act
West Moorabool Water Board	
	West Moorabool Water Board Act

Melbourne and Metropolitan Board of Works

The Board was constituted by Act of Parliament in 1890 and commenced operations on 18 March 1891. The original functions of the Board were to take over, control, and manage the existing metropolitan water supply system and to provide the metropolis with an efficient sewerage system. In 1922 responsibility for the disposal of nightsoil from unsewered properties within the same area was transferred from metropolitan municipalities to the Board.

In 1923 the Board was empowered to deal with main drains and main drainage works and to control and manage the rivers, creeks, and watercourses within the metropolis; in 1949 it was entrusted with the task of preparing a planning scheme for the Melbourne metropolitan area for the approval of the Governor in Council and, by legislation passed in 1954, it became a permanent planning authority.

In 1956 the Board was made responsible for metropolitan highways, bridges, parks, and foreshores, while under the *Road Traffic Act* 1956 it was required to appoint to the then Traffic Commission an officer experienced in traffic engineering.

The Board consists of a chairman and fifty-two commissioners. Each commissioner is appointed by, and must be a member of, one of the municipal councils entitled to representation. Members cannot sit longer than three years without reappointment. The chairman, however, is appointed for a four year term. This appointment, formerly made by the Board, is now made (under an amendment of the Melbourne and Metropolitan Board of Works Act dated December 1968) by the Governor in Council after consultation between the Minister and a committee appointed by the Board.

Area under the control of the Board

The area under the Board's control has been expanded in stages. The areas over which the Board exercises its several functions are now: water supply, 705 sq miles; sewerage, 482 sq miles; drainage and river improvements, 456 sq miles. Its town planning commitment extends over 1,942 sq miles.

At 30 June 1970 Melbourne's water supply system consisted of six storage reservoirs (Yan Yean, Toorourrong, Maroondah, O'Shannassy, Silvan, and Upper Yarra), with an available storage capacity of 65,452 million gallons, forty-nine service reservoirs and elevated tanks with a total capacity of 373 million gallons, and 7,176 miles of aqueducts, mains, and reticulation.

The water from the storage reservoirs flows by gravitation in aqueducts and pipelines to distributing reservoirs near the perimeter of the metropolitan area, thence by large mains to service reservoirs located at elevated positions within the metropolis from which the distribution mains radiate. The function of the service reservoirs is to regulate the pressure in their various zones of supply, to meet the daily peak demand, and to provide a reserve against failure of the main supply lines.

The distribution mains from the service reservoirs feed the reticulation system from which private service pipes are laid onto properties. As well as supplying metropolitan consumers, Melbourne's water supply has been extended to certain mountain districts in the Dandenong Ranges.

Further reference, 1964

Thomson-Yarra development scheme

In recent years the Board has undertaken a major scheme to amplify the city's water supply system. The first stage of the Thomson River Development Scheme is a 12 mile tunnel through the Thomson-Yarra Divide which when completed in 1973 will divert initially 20,000 million gallons of water a year from the Thomson River into the Upper Yarra catchment.

An integral part of this project is the construction of two "off-river" storages, Cardinia and Greenvale Reservoirs, located relatively close to Melbourne. Cardinia Reservoir, south of the township of Emerald, and 27 miles east of Melbourne, will have a capacity of 60,000 million gallons and will almost double Melbourne's existing storages. Cardinia will begin storing water in 1972 and be completed in 1973; it is well suited to

meet the demands of the rapidly developing southern and south-eastern suburbs. The reservoir will be supplied with water by the 84 inch/68 inch Silvan-Cardinia conduit from Silvan Reservoir, enabling the surplus waters from the O'Shannassy and Upper Yarra Reservoirs to be stored and thus further regulate those systems. The storage will not only conserve winter flows from unregulated creeks and streams, e.g., McMahons, Starvation, Cement, and Armstrong Creeks, for use during summer but also provide a substantial "bank" for use during extremely dry or drought periods.

Greenvale Reservoir is on a branch of the Moonee Ponds Creek in the Shire of Bulla and 13 miles north of Melbourne. Construction was completed late in 1971. With a capacity of 6,000 million gallons, Greenvale Reservoir is supplied with water by pipeline from either the Yan Yean or Silvan Reservoir systems. It is used as a "balancing" reservoir to supply the northern and western areas of the metropolis and is the first large dam to be built by the Board since the Upper Yarra Reservoir was completed in 1957.

Cost of water supply system

The cost of capital works in respect of the water supply system under the control of the Board is shown in the following table for each of the years 1965-66 to 1969-70, together with the total expenditure (less depreciation) to 30 June 1970 :

VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS: CAPITAL OUTLAY ON WATERWORKS (\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70	Total cost to 30 June 1970
Yan Yean System (including Greenvale)	69	288	432	2,618	5,362	10,519
Maroondah System	120	946	263	833	238	5,991
O'Shannassy, Upper Yarra, and Thomson System (including Silvan)	146	117	2,868	3,385	6,551	61,431
Service reservoirs	202	75	232	940	937	6,969
Large mains	3,689	2,309	1,438	1,332	3,010	56,028
Reticulation	3,562	3,683	3,977	4,146	4,127	54,856
Afforestation	2	2	10	4	20	689
Investigations, future works	42	22	161	993	960	2,334
Total outlay	7,832	7,442	9,380	14,250	21,205	198,817

Output of water

Output of water from the Board's storages rose gradually from 44,000 million gallons in 1956-57 to 69,000 million gallons in 1966-67. There was a substantial fall in output in 1967-68 due to extreme drought conditions experienced during that year and consequent restrictions on consumption by all users.

The total output of water from the various sources of supply for each of the years 1965-66 to 1969-70 was as follows :

VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS:
OUTPUT OF WATER
(million gallons)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Yan Yean Reservoir	4,130	5,650	2,461	4,477	3,874
Maroondah Reservoir	12,953	13,245	9,788	15,961	13,444
O'Shannassy River, Upper Yarra, and Silvan Reservoirs	48,117	49,929	38,628	42,856	49,732
Total output	65,200	68,824	50,877	63,293	67,050

Consumption of water

During the year ended 30 June 1970 the maximum consumption of water in Melbourne and suburbs on any one day was 396.8 million gallons on 9 February 1970, and the minimum consumption was 112.4 million gallons on 22 September 1969.

The following table shows, for each of the years 1965-66 to 1969-70, the number of properties supplied with water and sewers, the quantity of water consumed, the daily average consumption, and the daily average consumption per head of population served:

VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS:
WATER CONSUMPTION AND SEWERAGE CONNECTIONS

Year	Properties supplied with water at 30 June	Properties for which sewers were provided at 30 June	Total annual consumption of water	Daily average of annual consumption of water	Daily consumption of water per head of population served
	number	number	million gallons	million gallons	gallons
1965-66	612,844	467,705	65,218	178.68	84.28
1966-67	626,690	484,798	68,815	188.53	87.98
1967-68	642,039	509,185	50,876	139.00	64.06
1968-69	658,944	528,983	63,288	173.39	77.86
1969-70	676,111	543,870	67,063	183.73	80.41

Sewerage system

There are now one major and six minor systems collecting, purifying, and disposing of wastewater from the metropolis. These are the Farm System (major) and Braeside, Kew, Watsonia, Heatherton, Lower Plenty, and Western No. 2 (at Altona) Systems (minor).

The Farm System serves approximately 98 per cent of the sewered areas of the metropolis. Except for wastes from the greater part of the municipality of Sunshine, which are discharged directly into the Main Outfall Sewer, and



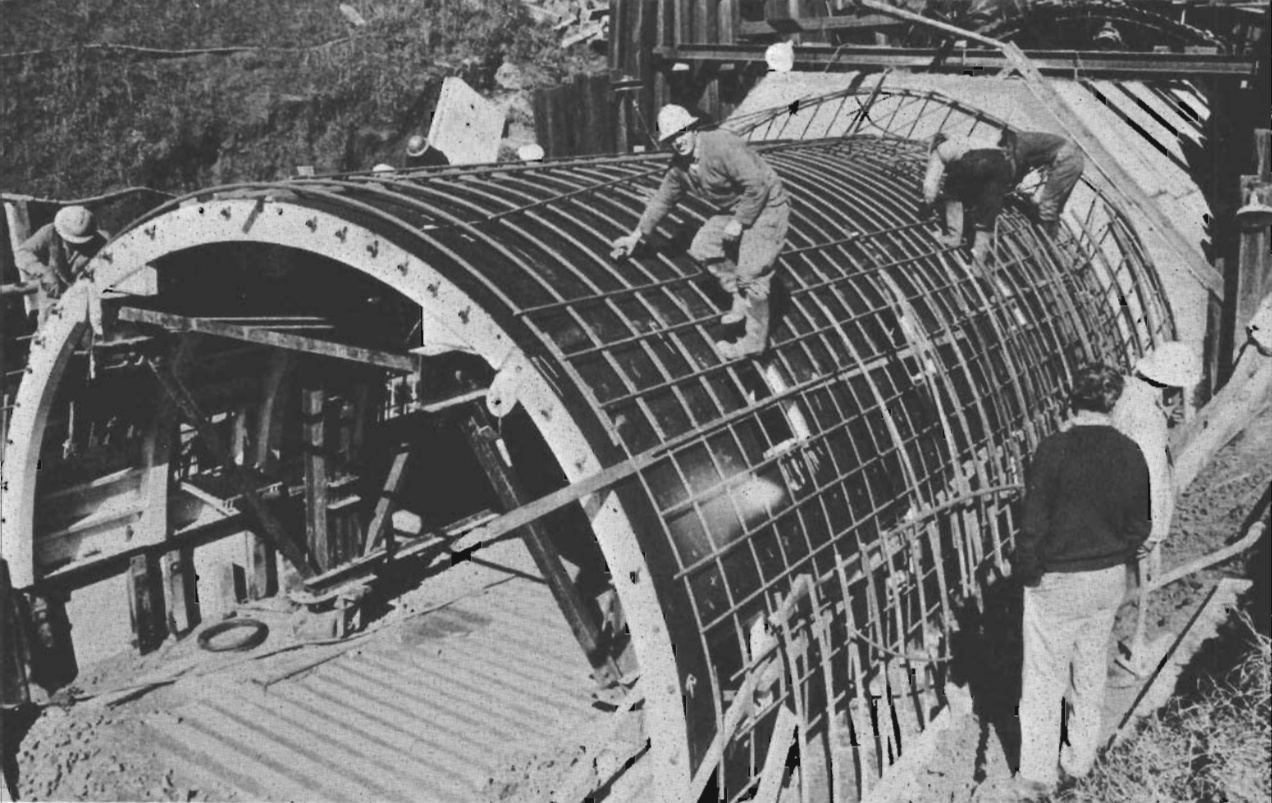
Interior of the old Royal Mint, Melbourne, now used by State Registrars for performing civil marriages.

Public Works Department

The careers centre, an advisory bureau for young people conducted by the Commonwealth Employment Service in Melbourne.

The Herald and Weekly Times Ltd



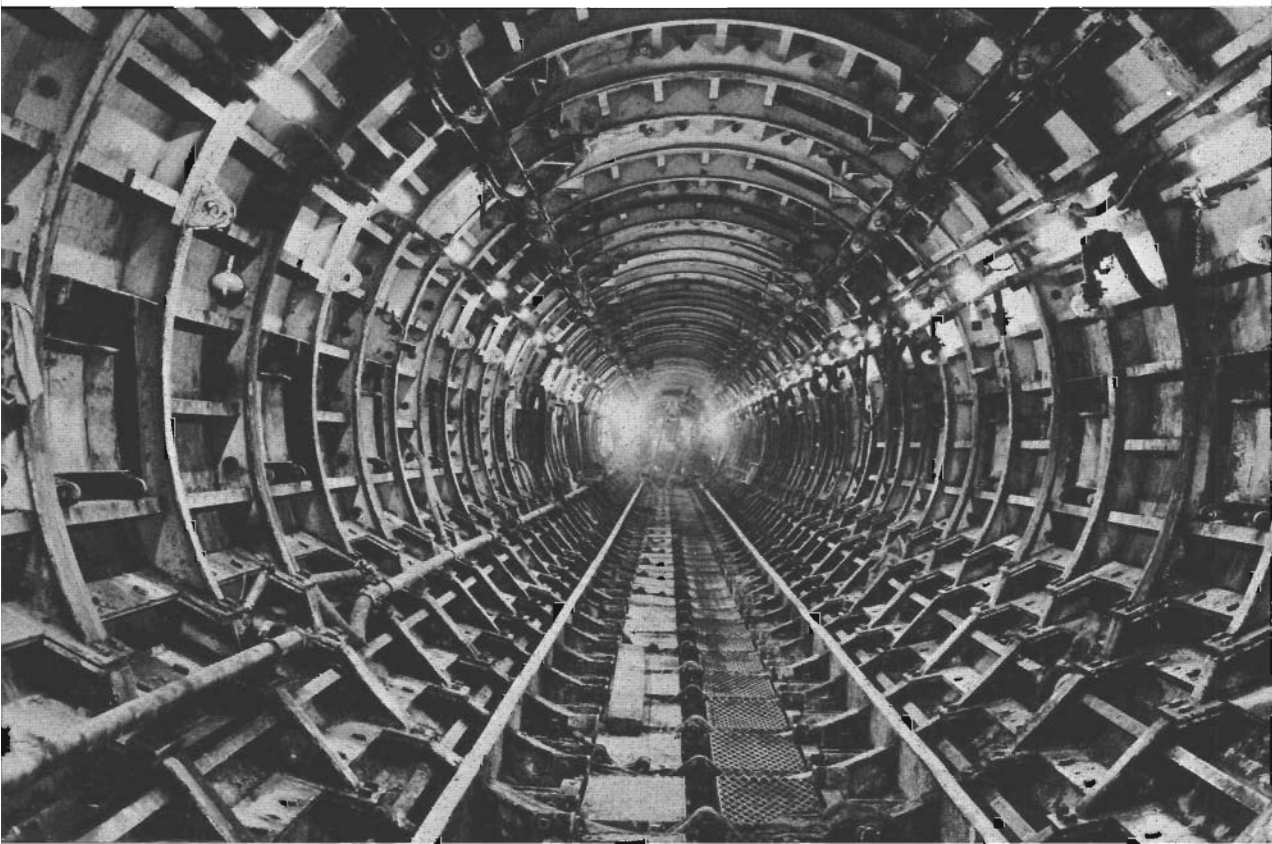


Internal formwork and reinforcing at the north portal of the Emerald Tunnel. This will be part of the connecting link between the Silvan and Cardinia reservoirs.

Melbourne and Metropolitan Board of Works

View inside steel formwork for lining the South-eastern Trunk Sewer at East Malvern. This huge sewer extends from Kew to Carrum and is part of the South-eastern Sewerage System being constructed to cope with Melbourne's increasing sewage load.

Melbourne and Metropolitan Board of Works



from Williamstown, which enter the main system at Spotswood, all wastes collected by the Farm System flow by gravity through two main sewers—the North Yarra and the Hobsons Bay main sewers—which unite at Spotswood. The combined flow then continues for 2.25 miles through a 9 ft 3 inch diameter trunk sewer which terminates at the Brooklyn pumping station.

At the pumping station, the wastewater is screened and then electrically driven pumps lift it 140 ft to the head of the 11 ft diameter main outfall sewer, along which it gravitates 16 miles to the Board's farm just beyond Werribee, where it is purified by either land filtration, grass filtration, or ponding.

The effluents resulting from these methods of purification comply with the prescribed standards set out in the Stream Pollution Regulations of the Department of Health and are finally discharged into Port Phillip Bay.

The Braeside System disposes of the wastewater from Mordialloc, Mentone, Parkdale, Cheltenham, and parts of Moorabbin and Oakleigh which, for economic reasons, could not be brought into the Farm System. The Braeside System came into operation on 22 May 1940, and has been extended north to include Monash University and adjacent areas. The treatment process includes sedimentation of the wastewater and subsequent biological purification by trickling filters and oxidation ponds.

The Kew, Watsonia, Heatherton, Lower Plenty, and Western No. 2 Systems serve small areas that could not be connected economically with the farm system. Purification is biological as at Braeside.

South-Eastern Sewerage System

In November 1964 the Board authorised the construction of the South-Eastern Sewerage System to relieve the existing Werribee farm system by intercepting wastewater flow in various main sewers and to provide a main sewer to service the rapidly developing areas to the east and south-east of Melbourne.

By August 1970 Board tunnellers had excavated the 20 mile long trunk sewer tunnel between Kew and Carrum. The \$43m purification plant at Carrum Downs is under construction, as also is the 35 mile long outfall sewer from Carrum to enable the discharge of purified effluent into Bass Strait at a point near Boag's Rocks west of Cape Schanck.

When complete, the South-Eastern System will virtually permit the division of the metropolitan area for sewerage purposes into two zones, eastern and western. The western zone will continue to be served by the farm system.

Cost of the sewerage system

The cost of sewerage works during each of the years 1965–66 to 1969–70, and the total cost (less depreciation) to 30 June 1970 are shown in the following table:

**VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS:
CAPITAL OUTLAY ON SEWERAGE SYSTEM
(\$'000)**

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70	Total cost to 30 June 1970
Farm purchase and preparation	388	416	464	526	429	11,730
Treatment works	909	1,829	1,667	2,182	1,925	9,844
Outfall sewer and rising mains	158	185	164	61	1,213	5,162
Pumping stations, buildings, and plant	1,297	686	184	521	1,943	16,953
Main and branch sewers	9,643	10,533	12,584	10,853	15,020	106,177
Reticulation sewers	6,418	5,306	7,828	6,187	9,618	99,337
Cost of house connections chargeable to capital	..	..	Cr. 24	Cr. 18	..	794
Sanitary depots	6	..	Cr. 24	Cr. 18	5	753
Investigations	72	71	137	244	356	1,259
Total outlay	18,893	19,026	23,004	20,557	30,507	252,009

Board of Works farm at Werribee

Ideally, the minerals and organic matter contained in a city's domestic and industrial wastewaters should be returned to the land from which they were originally derived. The Board's farm at Werribee is an example of profitable use of sewerage wastes. The once barren plain is enriched by treatment with these wastes to the extent that intensive grazing of sheep and cattle is possible, at the same time saving ratepayers up to \$500,000 a year. The revenue from the sale of livestock is set off against the cost of wastewater purification and results in the imposition of a lower sewerage rate than would otherwise be necessary.

Statistical data for the year ended 30 June 1970 are as follows :

Total area of farm	26,809 acres
Area used for wastewater disposal	17,065 acres
Average rainfall over 77 years	18.98 inches
Net cost of wastewater purification per head of population served	86c
Profit on cattle and sheep	\$371,497

Further reference, 1965

Disposal of nightsoil from unsewered premises

The responsibility for the collection, removal, and disposal of nightsoil from unsewered premises within the metropolis was transferred from the individual municipal councils to the Melbourne and Metropolitan Board of Works by legislation in 1922. By agreement, each council pays to the Board a prescribed amount per annum to offset the cost of the service, etc. For the year 1969-70 working expenses were \$125,146 and interest \$36,088, making a total of \$161,234. Revenue was \$221,030, giving a surplus of \$59,796.

Stormwater drainage and river improvements

In 1923 the Board was made responsible, by Act of Parliament, for the drainage of surface and storm water that flowed through two or more municipalities. Subsequent legislation gave the Board power to control the

principal stormwater drainage throughout the metropolis irrespective of municipal boundaries and to construct such drainage and river improvement works as it deemed necessary.

Finance for carrying out drainage works is provided mainly by loan funds, but a small proportion of capital works has been financed from the revenue derived from the Metropolitan Drainage and River Improvement Rate payable in respect of all rateable property in the metropolis since 1 July 1927. The costs of maintenance and operation, as well as interest charges, are also met from this annual rate.

Besides being responsible for underground main drains and many hundreds of miles of creeks and watercourses, the Board is responsible for metropolitan rivers, except in a limited area under the control of the Melbourne Harbor Trust. It keeps these rivers dredged for flood control and for the safe passage of small boats and pleasure craft; maintains the banks to prevent erosion; exercises control over trade discharges into the streams in the metropolis; and administers the by-law relating to the use of the rivers, thus ensuring that they will continue to be a source of pleasure to the people of Melbourne.

The total cost of drainage and river improvement works (less depreciation) to 30 June 1970 was \$38m. The length of main drains under the control of the Board at 30 June 1970 was 255 miles.

Metropolitan rivers and streams, 1969

Assessed value of property

The net annual value of property in 1969-70 for the purpose of the Board's rating was as follows:

	\$m
Water rate	499.4
Metropolitan general rate (for sewerage services)	416.3
Metropolitan drainage and river improvement rate	451.1
Metropolitan improvement rate	497.1

Finance for capital works

Capital works are financed mainly from moneys which the Board is given approval to borrow after the annual meeting of the Australian Loan Council has considered the projected loan programmes of semi-governmental authorities throughout Australia.

Board's borrowing powers and loan liability

The amount that the Board is empowered to borrow was increased from \$400m to \$500m on 7 May 1968 and is exclusive of loans amounting to \$4.8m originally raised by the Government for the construction of waterworks for the supply of Melbourne and suburbs. These works were vested in and taken over by the Board on 1 July 1891. The Board's total loan liability at 30 June 1970 was \$450m. All moneys borrowed are charged and secured upon the Board's revenues.

Revenue, expenditure, etc.

The following is a table of the revenue, expenditure, surplus or deficit and capital outlay of the Board in respect of its water supply, sewerage, and drainage functions during each of the years 1965-66 to 1969-70. The Board keeps a separate account of its financial activities as the Metropolitan Planning Authority. These activities are summarised in the table on page 262.

**VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS:
REVENUE, EXPENDITURE, ETC.
(\$'000)**

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
REVENUE					
Water supply—					
Water rates and charges (including revenue from water supplied by measure)	13,701	14,559	14,957	16,007	20,266
Sewerage—					
Sewerage rates	12,736	13,378	15,167	18,541	20,626
Trade waste charges	789	1,212	1,170	2,013	2,705
Sanitary charges	232	241	253	367	550
Metropolitan farm—					
Grazing fees, rents, pastures, etc.	9	8	7	9	5
Balance, livestock account	569	526	416	573	371
Metropolitan drainage and rivers—					
Drainage and river improvement rate	2,112	2,170	3,600	4,450	4,540
River water charges	14	17	17	21	33
Total	30,162	32,111	35,588	41,981	49,096
EXPENDITURE					
Water supply—					
Management	1,790	1,830	2,096	2,438	2,831
Maintenance	2,682	2,829	3,409	3,793	3,969
Water supply works	..	..	1,421	200	910
Sewerage—					
Management	1,451	1,532	1,780	2,069	2,340
Maintenance	1,792	2,051	2,217	2,638	3,269
Sewerage works	..	..	..	1,200	1,700
Metropolitan farm—					
Management	93	99	110	132	161
Maintenance	831	845	882	951	1,077
Metropolitan drainage and rivers—					
Management	270	275	318	381	462
Maintenance	267	365	507	589	726
Drainage works	..	..	355	934	990
Pensions and allowances	264	297	267	436	504
Loan flotation expenses	303	457	333	589	471
Interest (including exchange)	16,526	17,835	19,258	21,184	23,668
Contributions to—					
Sinking fund	1,046	1,131	1,206	1,315	1,380
Loans redeemed reserve	1,228	1,420	1,479	1,924	2,063
Renewals fund	663	968	749	771	904
Depreciation	77	352	59	53	57
Superannuation account	201	285	336	441	1,210
Municipalities—					
For road maintenance	34	..	..	49	49
Valuations	44	.. 96	.. 101	97	130
Rates equalisation reserve	600	Cr. 609	Cr. 1,278	Cr. 202	Cr. 299
Special reserve	..	..	..	..	500
Other	..	.. 50	.. 50	..	25
Total	30,162	32,111	35,655	41,981	49,096
Net surplus (+) or deficit (—)	+ 3	..	— 67	..	..
Capital outlay at 30 June—					
Water supply	146,540	153,983	163,363	177,613	198,817
Sewerage	158,915	177,941	200,945	221,502	252,009
Drainage and river improvement works	27,964	31,436	33,149	35,654	37,594

Town planning

Like most cities, Melbourne has suffered from unco-ordinated and uncontrolled development. As a remedial step, the Government in 1949

requested the Board to prepare a planning scheme for the whole area of the metropolis.

Accordingly, the Board made a survey that provided data for detailed basic plans showing the state of the metropolis in 1949, and these plans were used as a framework for the Master Plan which was made public in 1954. Shortly after this the Board was made the permanent metropolitan planning authority.

Between 1 March 1955 and 22 May 1968 the development of the Melbourne metropolitan area was controlled by the Board under a series of interim development orders, and on the latter date the Planning Scheme, as finally approved by the Governor in Council, became operative.

The advantages of an overall metropolitan development policy, as expressed by the Scheme, are now evident—particularly in the more orderly development of the newer suburbs. The proposals for public development in the form of roads, schools, hospitals, and parks act as a framework or guide to private development which is continuously taking place within the various land-use zones.

Further reference, 1966

Highways, bridges, and freeways

A complete network of highways and freeways designed to meet the needs of the Melbourne metropolitan area for the next twenty to thirty years is one of the major provisions of the Planning Scheme. The Board was made a responsible authority for metropolitan highways and bridges because Parliament recognised the vital importance of integrating such construction works with planning.

The most costly traffic delays occur within the central area, and new freeways and the major reconstruction of some existing roads, together with new overpasses and bridges, constitute the most pressing need. Comprehensive studies to determine construction priorities have been made and a programme, which forms the first and urgent part of the new network, has been drawn up. This programme is in progress, and projects have been completed at High Street, Kew; Hanna and Roy Streets (renamed Kings Way), South Melbourne; the first section of the South-Eastern Freeway from Batman Avenue to Grange Road Bridge; St Kilda Junction improvements; the Tullamarine Freeway; and the second section of the South-Eastern Freeway extending from Burnley to Toorak Road, Malvern.

Eastern Freeway

One of the next major projects of the Board is the construction of the Eastern Freeway from Alexandra Parade and Hoddle Street, Collingwood, to Thompsons Road, North Balwyn, to serve the rapidly developing eastern suburbs. The 5.4 mile long freeway will have eight lanes as far as the Chandler Highway and four lanes to Thompsons Road. The latter will be expanded to eight lanes as traffic demand increases. The freeway is estimated to cost \$27m. Provision has been made for a railway to be built in the freeway's central median. Details of the route to be followed by the freeway have been finalised, contracts for the project let, and work has commenced.

Further references, 1967 to 1971

Revenue, expenditure, etc.

The following table summarises the revenue, expenditure, and capital outlay of the Board in connection with its functions as the Metropolitan Planning Authority during the period 1965-66 to 1969-70 :

**VICTORIA—MELBOURNE AND METROPOLITAN BOARD OF WORKS:
PLANNING AND HIGHWAYS ACCOUNT, ETC.
(\$'000)**

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
REVENUE					
Metropolitan improvement rate and sundry income	4,914	5,136	6,022	6,223	7,570
EXPENDITURE					
Management	623	633	721	904	1,213
Maintenance	66	67	108	140	217
Interest	51	51	52	54	56
Contributions to sinking fund	24	24	24	24	24
Transfer to planning and highways reserve	4,114	4,311	5,064	5,032	5,978
Other	36	51	53	70	83
Total	4,914	5,136	6,022	6,223	7,570
Capital outlay at 30 June (a)	19,598	26,724	38,152	54,172	70,721

(a) Includes expenditure of the following amounts paid from the Roads (Special Projects) Fund; 1965-66, \$1,346,000; 1966-67, \$3,630,000; 1967-68, \$7,098,000; 1968-69, \$9,387,000; 1969-70, \$9,141,000.

Foreshores

The Board is responsible for the protection and improvement of 60 miles of the foreshore of Port Phillip Bay, from Werribee on the western side of the Bay to Canadian Bay in the east.

Works have been carried out at a number of places to arrest erosion, and other protective works are undertaken from time to time as the need arises.

Parklands

In addition to the parklands existing at the time of the preparation of the Planning Scheme, further lands in the metropolitan area have been reserved for public open space. The Board may acquire and develop such lands as parklands, gardens, or playing fields or transfer them to the relevant municipal councils to develop.

Water supply and sewerage in country towns

Constituted under the *Water Act* 1905, the State Rivers and Water Supply Commission commenced operations in 1906. In that year it took over from the Victorian Water Supply Department the general control of water supply to 111 towns, comprising a total population of 261,000. The Commission assumed direct responsibility for supplying 75,000 persons in fifteen centres. These centres included the mining towns of Bendigo and Castle-

maine and the sea port of Geelong (now served by the Geelong Waterworks and Sewerage Trust System).

The other ninety-six centres which had operated through local authorities now came under general supervision of the Commission. Of these local authorities, one quarter were within the Wimmera-Mallee Waterworks Districts, a similar number along the route from Melbourne to Wodonga, and the rest concentrated in the Ballarat area and the old mining towns to the north and north-west of that city, towns in the Sunbury-Kyneton-Lancefield area, and the northern irrigation areas.

During 1969-70 the Commission directly administered the water supply to 148 towns with a population of 248,220. The major urban systems directly involving the Commission are the Mornington Peninsula, Bellarine Peninsula, Otway, and Coliban systems. The Mornington Peninsula System dates back to 1916 when the Flinders Naval Base was supplied. Water is derived from the Bunyip and Tarago Rivers and travels over 100 miles to Point Nepean on the tip of the Mornington Peninsula. The Bellarine System serves all the major coastal towns to the east and south of Geelong on the Bellarine Peninsula from Portarlington to Anglesea. The Otway System, with headworks located in the Otway Ranges, supplies the major towns from Camperdown to Warrnambool. The Coliban System serves the Bendigo-Castlemaine area and also supplies limited irrigation water which is delivered under a permit system on a volume basis.

Other important groups include nearly forty small towns in the Wimmera-Mallee and twenty-two centres in the irrigation areas, but most of the urban population in the latter areas is served by local authorities taking bulk supply from the Commission.

At 30 June 1970 local authorities constituted for the administration of town water supplies numbered 201, of which 193 had works in operation serving 259 towns. The remaining authorities had works under construction. In all, about 680,000 persons in 278 towns will be served when these are completed. The predominance of local control is indicated by these figures which show that the population served from locally controlled schemes is nearly treble the population supplied from schemes directly managed by the Commission. In addition to their function as water supply authorities three local authorities are also responsible for sewerage systems. A brief description of the activities of these authorities follows.

Geelong Waterworks and Sewerage Trust

The Trust was constituted as the Geelong Municipal Waterworks Trust on 25 January 1908. It was reconstituted as a water and sewerage authority under the *Geelong Waterworks and Sewerage Act* 1909, and further reconstituted in September 1950 to include a Government nominee as chairman. An amendment in December 1966 provided that there shall be six commissioners comprising the chairman and a representative from each of five electoral districts.

The amount of loans which may be raised is limited to \$30m for water supply, \$20m for sewerage works, and \$1.32m for sewerage installations to properties under deferred payments conditions. The expenditure on these services to 30 June 1970 was : water supply \$19.89m ; sewerage \$14.20m ; and sewerage installation \$1.27m, of which \$0.15m was outstanding. The

revenue for the year ended 30 June 1970 was \$1.96m on account of water-works and \$1.23m on account of sewerage. Since 1913 the Trust has appropriated and set apart sums out of revenues for the creation of a sinking fund to redeem loans. To 30 June 1970 the amount so appropriated was \$2.18m and of this sum \$1.23m had been used to redeem maturing loans.

At 30 June 1970 the population served was estimated by the Trust at 120,260, the number of buildings within the drainage area was 33,241, and the number of buildings within sewered areas was 30,272.

Water supply

The water supply systems of the Trust are the Moorabool System and the Barwon System.

Moorabool System. The catchment of the watersheds is about 38,000 acres in area. There are six storage reservoirs and five service basins. The total storage capacity of the reservoirs and service basins of the Moorabool System is 4,318 million gallons.

Barwon System. This was acquired from the State Rivers and Water Supply Commission in 1955.

The catchment area of the watersheds is about 17,000 acres and comprises the head waters of the Barwon River and its tributaries. There are two storage reservoirs and six service basins. The total storage of the reservoirs and service basins of the Barwon System is 8,974 million gallons. The Trust is required to supply up to 700 million gallons per year to the State Rivers and Water Supply Commission's Bellarine Peninsula System.

Sewerage

The sewerage area, which is 21,220 acres, includes the Cities of Geelong, Geelong West, and Newtown, and suburban areas in the Shires of Corio, South Barwon, and Bellarine. At 30 June 1970 the sewerage system consisted of 366.2 miles of reticulation sewers and two main sewers extending from Geelong for six miles to join a single main outfall sewer seven miles in length reaching the ocean at Black Rock.

Further reference, 1961

Latrobe Valley Water and Sewerage Board

The Latrobe Valley Water and Sewerage Board was constituted on 1 July 1954. The Board consists of seven members: the manager, who is *ex officio* chairman, appointed by the Governor in Council; three members being elected by water supply, sewerage, and river improvement authorities within the La Trobe Valley; one member representing the State Electricity Commission of Victoria; one member representing private industry in the La Trobe Valley; and one member appointed by the Governor in Council as a government nominee. Further information about the La Trobe Valley will be found on pages 791-7 of the *Victorian Year Book* 1965.

Water supply

The Board is empowered to construct water supply works within the area of the La Trobe Valley, but at present is confining its main construction activities to the central and industrialised area, particularly around the towns of Morwell, Traralgon, and Churchill. Water supply will be extended in the near future to the townships of Tyers, Glengarry, and Rosedale.

The Board has constructed a storage of 7,000 million gallons capacity on

the Upper Tyers River. From this storage water is conveyed a distance of approximately 13 miles through pipelines of 60 inches and 42 inches diameter.

The capital cost of construction of waterworks was \$11.60m to 30 June 1970. Liabilities amounted to \$13.80m at 30 June 1970, including loans due to the Government totalling \$11.22m. The income for the year 1969-70 was \$0.83m and expenditure during the year amounted to \$0.64m, including interest on loans \$0.31m. The Board does not strike a rate, but charges consumers, including local water supply authorities, by measure. Water supplied during the year ended 30 June 1970 totalled 14,200 million gallons.

Sewerage

The Board has constructed an outfall sewer some 52 miles in length to convey wastes to an area where they are disposed of on agricultural land. Wastes conveyed by the outfall sewer consist mainly of industrial wastes such as paper wastes, together with small quantities of domestic sewage.

During 1969-70 sewerage works were confined mainly to the construction of a sewer to convey salt water effluent from Hazelwood Power Station to the Board's outfall sewer. The total capital cost of sewerage construction works to 30 June 1970 was \$6.98m.

The scheme is financed by government loan, the liabilities on account of loans at 30 June 1970 totalling \$6.22m. Income during 1969-70 was \$0.43m and expenditure, which included interest on loans of \$0.10m, was \$0.41m.

The Board does not strike a sewerage rate, but charges by measure for the receipt of wastes, both from industries and public authorities, such as sewerage authorities, in the area.

Further reference, 1961

The Ballarat Water Commissioners

The local governing body by the name of The Ballarat Water Commissioners was constituted on 1 July 1880 by the Waterworks Act of that year.

The water supply district of The Ballarat Water Commissioners covers an area of approximately 65 sq miles, including the City of Ballarat, the Borough of Sebastopol, and portions of the Shires of Ballarat, Buninyong, Bungaree, and Grenville. Water is also supplied in bulk to the Buninyong Waterworks Trust, the Miners Rest Waterworks Trust, the Smythesdale-Scarsdale Waterworks Trust, and to the Bungaree-Wallace Waterworks Trust. The total estimated population supplied is 67,000. The works comprise seven reservoirs, which have a total storage capacity of 5,435 million gallons. The catchment area is 25,082 acres. The Commissioners supply water to 21,517 tenements.

The total consumption of water for the year 1970 was 2,217 million gallons, and the average per capita consumption was 90 gallons per day. Approximately 85 per cent of the properties supplied are metered.

To 31 December 1970 the capital cost of construction was \$6.37m and loans outstanding (including private loans) were \$4.10m. During 1970 revenue amounted to \$0.55m and expenditure to \$0.55m.

Further reference, 1961

Ballarat Sewerage Authority

The Ballarat Sewerage Authority was constituted under the provisions of the *Sewerage Districts Act* 1915 by Order in Council dated 30 November 1920, which provides that the members of the Water Commissioners shall be the Sewerage Authority.

The Ballarat Sewerage District covers the City of Ballarat, the Borough of Sebastopol, and portions of the Shires of Ballarat, Buninyong, Bungaree, and Grenville.

At 31 December 1970 there were 20,907 assessments in the sewerage districts and 19,431 in declared sewerage areas, where 16,906 tenements were connected.

The capital cost of sewerage construction works to 31 December 1970 was \$6.12m. Construction is financed by debenture issue loans from various financial institutions. Loan liability at 31 December 1970 amounted to \$5.19m; redemption payments at that date totalled \$1.03m. Revenue during 1970 amounted to \$0.57m, and expenditure, which included \$0.37m on interest and redemption, was \$0.57m. During 1970, 101 contracts were completed under the deferred payments system, the amount outstanding at 31 December being \$0.17m.

Further reference, 1961

West Moorabool Water Board

The Board was constituted in May 1968 under the provisions of the West Moorabool Water Board Act and consists of five members: an independent chairman, nominees of the State Rivers and Water Supply Commission and the State Treasury, and the current chairmen of the Ballarat Water Commissioners and the Geelong Waterworks and Sewerage Trust.

The Board was formed to avoid any conflict of interests between the Ballarat Water Commissioners and the Geelong Waterworks and Sewerage Trust in the construction and operation of a reservoir located on the West Moorabool River about 16 miles south-east of Ballarat. The regulated flow from the reservoir will be apportioned between the Ballarat and Geelong authorities to supplement the supplies to their respective districts.

The intended reservoir, to be called the Lal Lal Reservoir, will have a capacity of 13.1 million gallons and a regulated annual output of 5,000 million gallons. The reservoir will be contained by an earth-core, rock-fill, dam, known as the Bungal Dam, 155 feet in height and 770 feet in length. Work on the dam is proceeding, and is expected to be completed in 1972 at an estimated cost of \$4.8m.

Finance for construction works is by private borrowings, the Board having raised \$3.2m in this way by 30 June 1971.

Under the Act, all Board expenditure shall be reimbursed by the Ballarat Water Commissioners and the Geelong Waterworks and Sewerage Trust who, in turn, are entitled to allocations of water from the reservoir in proportion to their contributions.

By an amending Act passed in April 1969, the Board has been permitted to meet loan interest and redemption payments from loan funds until such

time as the Minister of Water Supply declares the project completed and producing revenue.

Country sewerage authorities

With the exception of sewerage systems operated by the State Electricity Commission and the Eildon Sewerage District (under the direct administration of the State Rivers and Water Supply Commission), country sewerage works are controlled by local authorities. These local sewerage authorities operate under the direct supervision of the State Rivers and Water Supply Commission in a similar manner to the local water supply authorities. Of the one hundred and two local sewerage authorities constituted at 30 June 1970 (including the Geelong Waterworks and Sewerage Trust, the Latrobe Valley Water and Sewerage Board, and the Ballarat Sewerage Authority), seventy-seven authorities had systems in operation. A further ten authorities had systems under construction.

The following table shows particulars of all country sewerage systems which were in operation, or in course of construction (with the exception of those controlled by the State Electricity Commission), for each of the years 1965 to 1969 :

VICTORIA—COUNTRY SEWERAGE AUTHORITIES:
POPULATION SERVED, PROPERTIES CONNECTED,
INCOME, EXPENDITURE, ETC.

Particulars	1965	1966	1967	1968	1969
Number of systems in operation	57	61	63	67	72
Number of systems under construction	6	6	5	11	11
Estimated population served (at end of year)	522,885	544,248	572,001	612,633	634,711
Number of properties connected to sewers (at end of year)	147,537	156,863	167,071	176,964	186,319
	\$'000	\$'000	\$'000	\$'000	\$'000
General revenue account—					
Income—					
Rates	3,666	4,061	4,556	5,221	5,796
Other	1,810	1,923	1,963	2,362	2,634
Total	5,476	5,984	6,519	7,583	8,430
Expenditure—					
Working expenses	1,841	2,077	2,192	2,587	2,980
Other	3,516	3,844	4,290	4,811	5,617
Total	5,357	5,922	6,482	7,397	8,597
House connections account—					
Receipts	1,882	1,812	1,558	1,537	2,075
Expenditure	1,972	1,926	1,662	1,591	1,991
Loan account—					
Receipts	4,818	7,165	10,783	12,254	10,785
Expenditure	4,989	7,038	12,631	11,157	10,210
Loan liability (at end of year)	51,677	56,884	65,612	75,880	84,331

Metropolitan Fire Brigades Board

Municipalities within the Metropolitan Fire District contribute one third and fire insurance companies transacting business in the same area provide two thirds of the amount required to maintain metropolitan fire brigades. During 1969-70 contributions by municipalities were equivalent to 0.53 cents in the dollar of the annual value of property amounting to \$450m, while fire insurance companies contributed at a rate of \$17.60 for every \$100 of fire insurance premiums paid on insured property. Premiums received in the Metropolitan Fire District in 1968 amounted to \$27.3m.

Particulars of revenue, expenditure, and loan indebtedness of the Metropolitan Fire Brigades Board for each of the five years 1965-66 to 1969-70 are as follows :

VICTORIA—METROPOLITAN FIRE BRIGADES BOARD: REVENUE, EXPENDITURE, ETC. (\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
REVENUE					
Statutory contributions—					
Municipalities	1,569	1,734	2,026	2,065	2,402
Insurance companies	3,139	3,468	4,027	4,156	4,803
Charges for services	510	515	527	688	731
Interest and sundries	301	350	324	376	371
Total	5,519	6,067	6,904	7,285	8,307
EXPENDITURE					
Salaries	3,710	4,117	4,345	5,082	5,585
Administrative charges, etc.	612	704	646	759	827
Partially-paid firemen and special service staff allowances	294	306	313	388	430
Plant, purchase and repairs	330	416	532	568	618
Interest	36	35	34	33	32
Repayment of loans	23	24	25	21	22
Superannuation fund	213	229	243	287	389
Motor replacement reserve	91	96	103	120	141
Pay-roll tax	105	115	122	143	158
Miscellaneous	320	111	98	446	186
Total	5,734	6,153	6,461	7,847	8,386
Net surplus (+) or deficit (—)	— 215	— 87	+ 443	— 561	— 80
Loan indebtedness at 30 June	646	622	597	576	554

The following table shows particulars of the number of fire stations operated by the Metropolitan Fire Brigades Board and the number of staff employed at 30 June in each of the years 1966 to 1970 :

**VICTORIA—METROPOLITAN FIRE BRIGADES BOARD:
NUMBER OF FIRE STATIONS AND STAFF EMPLOYED**

Particulars	At 30 June—				
	1966	1967	1968	1969	1970
Fire stations	44	45	45	45	45
Staff employed (a)—					
Fire fighting	1,088	1,124	1,153	1,175	1,166
Partially-paid firemen and special service staff	113	104	105	112	113

(a) Excluding clerical staff.

Further reference, 1961

Country Fire Authority

The headquarters of the Authority are situated in Malvern where an operations centre is in direct radio contact with every fire control region throughout the State. At 30 June 1970 there were seventy-one permanent firemen employed in brigades at Ballarat, Bendigo, Geelong, Geelong West, and Dandenong, with a total of fifty-five permanent brigade officers at these stations and at Chelsea, Doveton, Frankston, North Geelong, Mildura, Morwell, Norlane, Shepparton, Springvale, Traralgon, Wangaratta, and Warrnambool.

Volunteer representatives of urban and rural training committees attend briefing schools annually to receive instruction on the current syllabus for the purpose of organising local training sessions. Teacher training is given by the Training Wing in the field to selected volunteers. In this way emphasis on training has moved to group and brigade level with a much wider field of effectiveness than was possible with regional schools.

The revenue of the Country Fire Authority consists mainly of statutory contributions, in the proportion of one third from the Victorian Treasury's Municipalities Assistance Fund and two thirds from insurance companies underwriting fire risks in the country area of the State. There were 188 insurance companies so contributing during 1969–70.

Up to 30 June 1970 the Authority had raised eighty loans, representing a total of \$5.53m, which had been used for the provision of buildings and equipment for brigades.

Particulars of revenue, expenditure, surplus, and loan expenditure and indebtedness of the Country Fire Authority, for each of the years 1965–66 to 1969–70, are shown in the first of the following tables. The second table gives details of the number of fire brigades, personnel, and motor vehicles for the same years.

VICTORIA—COUNTRY FIRE AUTHORITY: REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
REVENUE					
Statutory contributions—					
Municipalities Assistance Fund	691	835	953	1,038	1,225
Insurance companies	1,382	1,669	1,907	2,075	2,451
Other	67	77	93	101	117
Total	2,140	2,581	2,953	3,213	3,793
EXPENDITURE					
Salaries and wages	823	995	1,101	1,300	1,486
Depreciation	85	102	115	130	152
Insurance	92	99	108	113	118
Interest	94	116	136	161	189
Maintenance	408	482	640	567	526
Motor replacement fund	184	208	229	257	287
Other	272	342	435	526	685
Total	1,958	2,344	2,764	3,054	3,443
Net surplus	182	236	189	159	350
Loan expenditure	431	433	554	606	506
Loan indebtedness (at 30 June)	1,870	2,286	2,630	3,034	3,521

VICTORIA—COUNTRY FIRE AUTHORITY: NUMBER OF FIRE BRIGADES,
PERSONNEL, AND MOTOR VEHICLES

Particulars	At 30 June—				
	1966	1967	1968	1969	1970
Fire brigades—					
Urban	206	208	208	209	211
Rural	1,048	1,051	1,048	1,050	1,050
Personnel—					
Professional	162	169	180	185	191
Volunteer	112,984	114,730	117,333	118,569	111,635
Motor vehicles—					
Transport	63	67	70	75	76
Fire service	996	1,036	1,079	1,134	1,190

Local government and semi-governmental bodies : new money loan raisings

In the following statement particulars are given of the new money loan raisings for capital works, during each of the years 1965-66 to 1969-70, by local government, semi-governmental, and other public bodies in Victoria:

**VICTORIA—LOCAL GOVERNMENT, SEMI-GOVERNMENTAL, AND
OTHER PUBLIC BODIES: NEW MONEY LOAN RAISINGS**

(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
LOCAL GOVERNMENT					
Due to government	261	279	396	340	174
Due to public creditor	23,207	28,926	31,995	28,515	26,837
Total local government	23,467	29,205	32,391	28,855	27,010
SEMI-GOVERNMENTAL, ETC.					
Due to government (a)	45,614	43,763	53,425	55,236	58,476
Due to public creditor	93,793	101,210	102,617	124,269	119,869
Total semi-governmental, etc.	139,408	144,973	156,042	179,505	178,345
ALL AUTHORITIES					
Due to government (a)	45,874	44,042	53,822	55,576	58,650
Due to public creditor	117,000	130,135	134,611	152,784	146,705
Total	162,875	174,178	188,433	208,359	205,355

(a) Including the following advances by the Commonwealth Government under the Commonwealth-State Housing Agreement: \$24,229,000 in 1965-66, \$23,354,000 in 1966-67, \$23,866,000 in 1967-68, \$25,688,000 in 1968-69, and \$25,883,000 in 1969-70.

Port Phillip Authority

The Port Phillip Authority is a statutory body which was appointed pursuant to the provisions of the *Port Phillip Authority Act* 1966. The Act was proclaimed to come into operation from 7 September 1967.

Port Phillip Bay covers an area of about 735 sq miles and its total coastline measures approximately 164 miles. The eastern shores mostly comprise long stretches of broad sandy beaches alternating with some relatively high rocky cliffs. The western shores are comparatively narrow and shallow with few cliff areas.

The Authority's jurisdiction extends in a strip approximately 10 chains to landward and 30 chains to seaward of the shoreline around the foreshores of Port Phillip and also to a part of the Bass Strait beach frontages from Cape Schanck to Ocean Grove.

The Authority's primary responsibility is to advise the Minister of Lands on matters relating to the preservation and improvement of the foreshores and the beaches around the Bay for the full use and enjoyment of the public. To assist the Authority in determining a balanced approach towards the development of the foreshore, whilst at the same time preserving

the natural beauty and assets of the area for future public needs, the Authority has conducted a number of basic surveys relating to foreshore utilisation, structures, and parking on the foreshore. The Authority is also participating in an environmental study of the physical, chemical, and biological characteristics of the Bay with the Fisheries and Wildlife Branch and the Melbourne and Metropolitan Board of Works.

Further surveys and investigations relating to the existing conditions in and around the Bay have been planned and when completed, it is proposed to use the information as a basis for the preparation of a master plan for the whole of the Port Phillip area. This plan will set out in broad terms the desirable usage and condition of all sections of the Bay's foreshores and inshore waters for the continued enjoyment of the present and future generations.

Western Port Regional Planning Authority

The Western Port Regional Planning Authority was constituted on 25 February 1969 by Order of the Governor in Council, under the provisions of section 12 of the *Town and Country Planning Act* 1961. The Town and Country Planning Act was amended in 1968 to provide for the establishment of regional planning authorities in Victoria, and the Western Port Regional Planning Authority was the first to be established.

The area of the Region is 648 sq miles, which contains a population of about 50,000. It has a varied topography, ranging from the hilly, undulating country of the Mornington Peninsula, through the flat coastal areas of Western Port, the former Koo-Wee-Rup swamps to the foothills of the Strzelecki Ranges, and the islands of Western Port. The shores of Western Port are of particular ecological interest because of the existence of salt marshes and mangrove swamps.

The Authority is composed of twelve members representing the six municipalities within the Region. These municipalities are the Shire of Flinders, Shire of Hastings, Shire of Mornington, Shire of Phillip Island, and part of the Shire of Bass and of the Shire of Cranbourne. Each municipality nominates two members to the Authority. French Island is also included within the Region, but because it is not incorporated in any municipality, it is not represented on the Authority. The Authority elects a chairman from its members, and he holds office for a period of 12 months. The Authority employs a small staff of professional officers headed by a director. It has the statutory obligation to prepare and submit a planning scheme for the Region, and to enforce and carry out this planning scheme. The operating costs of the Authority are met by the member councils in agreed proportions.

The area has great industrial potential as well as potential for residential, tourist, and recreational development. The industrial potential has been highlighted by the availability of the deep water harbour of Western Port suitable for large ships and by the south-easterly growth of the Melbourne complex. The recreational and tourist facilities of the Region are already very popular, and are capable of considerable expansion.

In 1967 the State Government brought down Statement of Planning Policy No. 1 (Western Port) which lays down guidelines for the regional

planning necessary for the expected port and industrial development in the Western Port area on both the mainland and French Island. At the same time the value of the Mornington Peninsula for conservation, recreation, and scientific interests, was recognised in Statement of Planning Policy No. 2 (Mornington Peninsula) which lays down guidelines for the regional planning necessary to conserve and preserve the natural resources of the area. Both statements of planning policy oblige the Authority to protect the Region from all types of pollution.

In order to implement these policies, and to plan development in a logical, orderly manner, prior to the approval of the Regional Planning Scheme, the Regional Authority made an interim development order over the whole Region, which was gazetted on 7 October 1970. This order divides the Region into areas of urban, non-urban, and special significance.

6

PRIMARY PRODUCTION

LAND SETTLEMENT AND IRRIGATION

Land utilisation

The climatic conditions of Victoria (for details see pages 49 to 68), especially the varying incidence of rain, have resulted in the development of a wide range of farming practices, but at the same time have been largely responsible for restricting the number of enterprises on individual farms. Farming is generally carried out on a single enterprise basis, a major exception being the association of cereal growing and sheep grazing in the main wheat areas. Other exceptions occur on a less extensive scale with other forms of production.

Most farms in the State are owner operated and, with the exception of the larger holdings, the routine work on the farm is carried out by the farmer and his family, but at times of peak labour requirement, such as during shearing or harvest, additional labour is employed.

Considerable areas in the State are retained as forest reserves and for water catchments (see page 280).

The pattern of land use is more or less clearly defined in each of the statistical districts (see map on page 307). Thus the Mallee and the northern part of the Wimmera District are used almost exclusively for cereal production and sheep raising. The more intensive carrying of livestock in these districts has been made possible by a channel system of domestic and stock water supply originating in the mountainous areas of the Grampians to the south. The agriculture of the Northern District is based largely on irrigation and ranges from dairying to fruit production. The non-irrigated parts of the district are used for cereal and sheep production. In the Western, Central, North-Central, North-Eastern, and Gippsland Districts, the rainfall is heavier and more reliable; consequently, there is more diversity in land utilisation. In these districts, sheep grazing and dairying are the most important industries. Cultivation is generally limited. Some wheat is grown in the North-Eastern and Western Districts and there is some production of potatoes, vegetables, and other intensive cultivation crops on the more fertile soils in the higher rainfall parts.

Mallee District

This district is situated in the far north-west of the State and has a total area of 10.8 million acres. However, there are extensive areas in the north and west which, because of water shortage and the liability to severe soil

erosion, have not been settled, and the total area occupied is 7.7 million acres.

The soils of the district being light in texture are easily and cheaply cultivated and the main farming enterprise is cereal cropping, associated with wool and prime lamb production. Wheat is the principal crop grown in addition to oats for grain, hay and grazing, and barley. Yields from cereal crops vary widely according to seasonal conditions. The following table gives the areas sown and average yields per acre for the season 1969-70:

MALLEE DISTRICT—CEREAL CROPS, SEASON 1969-70

Crop	Area	Average yield per acre
	acres	
Wheat	1,476,177	22.38 bushels
Oats—grain	123,498	19.11 bushels
hay	22,070	1.37 tons
grazing	28,758	..
Barley	189,164	20.21 bushels

In the past, lack of suitable pasture species was a major problem in pasture development, and the grazing was provided largely by native pastures, green cereal crops, and crop stubbles. The discovery and introduction into crop rotations of suitable medics has resulted in marked benefit to both crop production and grazing. The use of medics is now widespread in the district and has greatly improved the conditions for production of early prime lambs mainly for the Melbourne market. Dry land lucerne has also contributed to the vastly improved grazing afforded by the pastures.

In 1969-70 the district carried 2.2 million sheep and produced 22.0 million lb of wool in addition to the early lambs.

Irrigation areas located close to the Murray River, which marks the northern boundary of the State, produce most of the State's dried vine fruits and considerable quantities of citrus fruits.

Wimmera District

The Wimmera occupies the central western part of the State and has an area of 7.4 million acres, of which 6.2 million acres are occupied. Average annual rainfall in the north is about 16 inches per year, increasing in the south to 20 inches. The Grampians in the south of the district have a higher rainfall. This area is unsuited to agricultural production and is retained by the Crown as a watershed area and forest reserve.

There are wide variations in soil type, but the district includes substantial areas of fertile self-mulching clay loams, which are among the most productive wheat-growing soils in Australia. South and east of the Grampians the soils are podzols and in the south-west there is a large area of light-textured grey soils.

Wheat farming in association with fine-wool growing or prime lamb production is the main farm enterprise over the north and central Wimmera. Both climate and soils are suited to cereal cropping and yields obtained are high. In recent years the development of suitable strains of medics and

clovers has resulted in the inclusion of a pasture phase in crop rotations.

The table below shows the areas of the cereal crops sown and average yields for the season 1969-70:

WIMMERA DISTRICT—CEREAL CROPS, SEASON 1969-70

Crop	Area	Average yield per acre
	acres	
Wheat	992,091	29.45 bushels
Oats—grain	261,702	26.89 bushels
hay	24,325	2.01 tons
grazing	21,998	..
Barley	120,142	22.89 bushels

In addition to mixed sheep and wheat farming, there are extensive areas, particularly in the south and west of the district where rainfall is higher and pasture establishment easier, which are used solely for grazing. About three quarters of the sheep carried in the area are Merinos, and, although a number of early fat lambs come from the wheat growing areas, emphasis here is more generally on fine-wool production and breeding. In 1969-70 the district carried about 5.2 million sheep and produced 57.3 million lb of wool. As is the case in the Mallee, dairying and beef cattle production are only of minor importance.

Northern District

This is an area of plains country extending from the Central Highlands in the south to the Murray River in the north. The total area of the district is 6.3 million acres, of which 5.6 million acres are occupied for agricultural purposes. The soils vary from typical light Mallee soils in the north-west to fertile red-brown earths in the east. Average annual rainfall is 14 inches in the north-west and increases to 25 inches over the foothills of the ranges, which are on the eastern boundary of the district. The district includes the major irrigation areas of the State, and because of this several different farming enterprises are carried out.

Wheat growing is an important industry and because of climatic and soil differences, yields vary widely across the area. As in the other wheat producing districts, oat crops are an important feature in rotations and for grazing. In the 1969-70 season the following areas of cereal crops were sown:

NORTHERN DISTRICT—CEREAL CROPS, SEASON 1969-70

Crop	Area	Average yield per acre
	acres	
Wheat	636,004	24.82 bushels
Oats—grain	197,087	25.02 bushels
hay	52,838	2.09 tons
grazing	19,755	..
Barley	77,635	23.83 bushels

In 1969-70 the district carried about 4.4 million sheep, largely on wheat farms, and emphasis is on prime lamb production rather than fine-wool growing. Extensive irrigation has made it possible to establish highly productive perennial pastures which are used mainly for dairy production, but, in addition, the irrigation areas fatten sheep and lambs from the non-irrigated area in Victoria and New South Wales. The milk produced is mostly used for butter, cheese, and other manufactured products, but small quantities are used for city wholemilk supply. In 1969-70 there were over 485,000 dairy cattle in the district.

Apart from dairying, irrigation has permitted the establishment of an important fruit growing industry. This area supplies fresh fruit to Victorian and interstate markets and also provides fruit, mainly apricots, pears, and peaches, for the important canneries operating in the district. Tomatoes are also produced on a large scale.

North-Central District

This district includes much of the Central Highlands area and the average annual rainfall is generally over 28 inches, but on the northern slopes it is as low as 22 inches. There is wide variation in topography and soils and much of the area is used for grazing sheep and beef cattle. However, the district is relatively small, containing only 2.9 million acres, of which 2.1 million acres are occupied and used for farming production.

Cereal cropping is unimportant, but potatoes in the volcanic hills east of Ballarat and pome fruits in the Harcourt area are the most important crops grown. Although dairy farms are scattered throughout the district, it is marginal for this form of production and emphasis is on sheep production associated with beef production. In 1969-70 the district carried about 2.7 million sheep and about 158,000 beef cattle.

North-Eastern District

The district has a total area of 7.2 million acres, but includes substantial areas of Crown lands, many of which are very steep and heavily timbered. The area occupied is 3.7 million acres. Annual average rainfall varies from 20 inches in the north-western corner of the district to well over 60 inches over the mountains. Almost all of the area used for rural production has a 20 to 30 inch rainfall.

Although cereal cropping is not general, there is an interesting development of ley farming based on subterranean clover pastures. However, areas concerned and production are small in relation to the State totals. The fertile river valleys are suited to speciality crop production, and in 1969-70, 10,600 acres of tobacco and small quantities of hops were grown in these areas. In 1969-70 the district carried 118,000 dairy cattle, mainly along the river valleys.

Prime lamb growing and crossbred wool production are the main sheep enterprises in the north-western and western parts of the district, but fine-wool growing is more common on the unimproved pastures along the Murray Valley and in the Omeo area. The district carries about 2 million sheep.

The North-Eastern District is an important beef cattle breeding and fattening area, and in 1969-70 over 404,000 head were carried. The cattle make good use of the rough pastures of the foothill country and the productive pastures of the flats make suitable fattening areas.

Western District

Most of the district falls in the 25–30 inches average annual rainfall belt, but an area north and east of the Otways is influenced by a rain shadow effect and the average annual rainfall is about 24 inches. In the Otway Ranges the average annual rainfall is as high as 70 inches. The soils of the district vary considerably in type and fertility. Basaltic soils cover the great bulk of the plains area. In the north the soils are similar to those of the southern Wimmera. The total area of the district is 8.8 million acres of which 6.8 million acres are occupied. There are substantial areas of forest reserve in the Otways, which are in the south-eastern part of the district.

The only cereal crop of importance grown is oats, which are used as a fodder crop, cut for hay, or harvested for grain which is also used very largely to feed stock. The more fertile soils produce both potatoes and onions, and about 60 per cent of the State's onion acreage is located on volcanic tuff soils near Colac and Warrnambool. However, emphasis is placed on animal production, and climatically the district is well suited to the development of improved pastures. It is the major wool producing area of the State, and in 1969–70 there were 12.0 million sheep in the district. In 1969–70 40 per cent of the total sheep population was Merino, and the fine-wool breeds—Merino, Polwarth, and Corriedale—made up 68 per cent of the total sheep population. There are relatively few crossbreds, and prime lamb production does not have the same importance as in other districts. The Western District is an important beef cattle breeding and fattening area and in 1969–70 carried 621,000 head. Many of the State's leading stud herds are located in the district and in addition, many sheep properties carry beef cattle.

Dairying is an important industry and there is widespread distribution of dairy cattle. However, the main concentrations are in the following areas : Colac, Camperdown, Koroit, Allansford, and the Casterton–Coleraine region. A proportion of production is used as wholemilk for town supply, but a considerable proportion of the State's processed milk products and butter is produced in the district, which in 1969–70 carried 460,000 dairy cattle.

Central District

Average annual rainfall varies from 24 inches within the rain shadow area, north of Geelong, to more than 35 inches over the ranges north and east of Melbourne. Topographically there is variation from plains country on the western side of Port Phillip Bay to the steep hill country north and east of Melbourne. There is also a wide variation in soil type and fertility. The total area of the district is 4.1 million acres and 2.7 million acres are occupied—the remainder being reserved as forest and watershed areas.

The climate is suited to the production of malting barley and in 1969–70 61,000 acres were grown—mainly on the plains to the west. Potatoes are grown in the Romsey–Ballarat area, on the Bellarine Peninsula, and the Koo Wee Rup Swamp.

Market gardening is important in the area extending from the south-eastern suburbs of Melbourne to the northern shores of Western Port, and also on the irrigation settlements near Werribee and Bacchus Marsh.

The district is the major producer of apples ; dessert types of pears and peaches and other stone fruits are also important. Orchards are located in

the eastern metropolitan area, on the Mornington Peninsula, and near Bacchus Marsh and Pakenham. Ninety per cent of the State's strawberry crop is grown in the Dandenong Ranges some 25 miles east of Melbourne.

In 1969-70 the district carried 2.6 million sheep and production is almost evenly divided between fine-wool growing and fat lamb production.

Beef cattle are grazed in conjunction with sheep over most of the area, but in the east they are run with dairy cows to produce vealers.

The major dairying area is in the east, and this forms part of the most important dairying area of the State. The area is a major supplier of wholemilk for city supply and for butter and cheese manufacture. In 1969-70 there were 269,000 dairy cattle in the district. Pig production is also important.

Gippsland District

The total area of this district is 8.7 million acres, but the northern and eastern parts are mountainous and are reserved by the Crown. The area occupied is 4.4 million acres and the bulk of settlement is south of a line between Dandenong and Bairnsdale. Average annual rainfall varies from just under 22 inches within the rain shadow near Maffra and Sale to 60 inches and above in the highlands. An intensive irrigation scheme has developed around Maffra with highly productive dairying. Average rainfall over most of the settled areas in the west is sufficient for the development of fertile perennial pastures. The soils range from poor sands to relatively fertile loams. The highly fertile alluvial soils of the river valleys are important sources of production.

With the exception of forage crops, cropping is not important in the area, although certain speciality crops, such as maize, beans, and potatoes, contribute substantially to the State's total production.

Gippsland is the main dairying district of the State and dairying is by far the most important rural industry in the district. The highly productive pastures of the 30 to 40 inches average annual rainfall areas are the basis of the industry. The district supplies the greater part of the whole-milk requirements for the Melbourne market and plays a major part in the production of butter, cheese, and other processed dairy products. In addition, the dairy herds contribute to veal and beef production. In 1969-70 the district carried about 560,000 dairy cattle. Pig raising is associated with dairy farming, and there are 61,000 pigs carried in the area.

In western and southern Gippsland sheep production is small and consists largely of fat lamb producing flocks run in conjunction with dairy cattle. In parts of the district east of Rosedale, fine-woolled sheep and beef cattle are valuable enterprises.

Alienation of land

The total area of the State is approximately 56,245,760 acres. On 30 June 1970 this comprised :

	acres
Lands alienated in fee-simple	33,213,059
Lands in process of alienation	429,831
Crown lands	22,602,870
Total	56,245,760

Crown lands comprise :

Land in occupation under—		
Perpetual leases		36,614
Grazing leases and licences		5,139,485
Other leases and licences		292,558
Reservations—		
Reserved forest		5,656,671
Forest and timber reserves (under Land Act)		150,187
Water catchment and drainage purposes		213,972
National parks (under National Parks Act)		506,537
Wildlife reserves (administered by Fisheries and Wildlife Department)		126,954
Water frontages, beds of streams and lakes (not included above)		843,950
Other reserves		288,810
Unoccupied and unreserved but including areas set aside for roads		9,347,132
Total		22,602,870

In the following table are shown the area of Crown lands sold absolutely and conditionally, and the area of lands alienated in fee-simple during the five years 1964 to 1968. A portion of the area conditionally sold reverts to the Crown each year in consequence of the non-fulfilment of conditions by the selectors. The lands alienated each year include areas selected in previous years.

VICTORIA—ALIENATION OF CROWN LANDS

Year	Area of Crown lands sold			Crown lands alienated in fee-simple	
	Absolutely, at auction, etc.	Conditionally to selectors	Total	Area	Purchase money
	acres	acres	acres	acres	\$
1964	3,896	23,055	26,951	76,587	406,554
1965	4,705	20,757	25,462	76,965	280,839
1966	27,135	12,508	39,643	53,136	420,313
1967	18,120	48,239	66,359	40,780	566,717
1968	17,880	27,191	45,071	57,014	509,413

Information regarding the Assurance Fund is found on page 679 of this book.

Government assistance to the farming industry, 1964

Land Conservation Council

The Land Conservation Council came into being on 15 February 1971 when an Act of Parliament to make better provision in relation to the conservation of public land was proclaimed. The Council comprises a chairman appointed by the Governor in Council and permanent heads (or their nominees) of the Soil Conservation Authority, the Department of Agriculture, the Forests Commission, the Lands Department, the State

Rivers and Water Supply Commission, the Mines Department, the Department of Fisheries and Wildlife, and the National Parks Authority, as well as a person with experience in the conservation techniques used in developing land for primary production, and two persons with special knowledge of and experience in some aspects of the conservation of natural resources, the latter three being appointed by the Governor in Council.

The functions of the Council are :

1. to carry out investigations and make recommendations to the Minister with respect to the use of public land in order to provide for the balanced use of land in Victoria (public land is defined as land which is not within a city, town, or borough, and is unalienated land of the Crown including land permanently or temporarily reserved under the Land Act and State Forest, land vested in any public authority other than a municipality or sewerage authority, or land vested in the Melbourne and Metropolitan Board of Works);
2. to make recommendations to the Governor in Council as to the constitution and definition of water supply catchment areas under the *Soil Conservation Land Utilisation Act 1958* ; and
3. to advise the Soil Conservation Authority concerning policy on the use of land (whether public land or any other land however vested) in any water supply catchment area.

In making any recommendation the Council must take into account the present and future needs of the people of Victoria in relation to :

1. the preservation of areas which are ecologically significant ;
2. the conservation of areas of natural interest, beauty, or of historical interest ;
3. the creation and preservation of areas of reserved forest ;
4. the creation and preservation of areas for national parks ;
5. the creation and preservation of areas for leisure and recreation, and in particular of areas close to cities and towns for bushland recreation reserves ;
6. the creation and preservation of resources for the conservation of fish and wildlife ;
7. the preservation of species of native plants ; and
8. land required by government departments and public authorities in order to carry out their functions.

To ensure that all opinions are heard and all facts considered before recommendations are made, the Act provides for publication in the *Government Gazette* and in the newspapers circulated throughout the State, as well as the newspapers circulated particularly in the vicinity of the area or district concerned, notification that an investigation for an area is proposed. Any person or body may make submissions to the Council about how any public land can be better used to meet the needs of the people of Victoria, and the Council is required to consider these submissions before making any recommendation concerning the use of public land to the Minister.

Because it is the most populated State in Australia in relation to area, Victoria illustrates the problem of how society demands land for various

purposes, some of which are compatible, and some conflicting or competitive. When there are, or it is anticipated that there will be, conflicting or competitive demands for land, decisions must be made and these should be based on proper criteria. The Council's function is to ensure that recommendations are made on the basis of significant scientific and other criteria.

Soil Conservation Authority, 1961-71; Land Utilisation Advisory Council, 1962, 1967, 1970; Destruction of vermin and noxious weeds, 1963; Soil, land use, and ecological surveys, 1966; Farm water supplies, 1968; Group conservation, 1969

Rural finance facilities

Australia's national policy for permanent land settlement has been based on the family unit farm. Financially this has seldom been easy because even in the early days settlers found it difficult to earn enough to maintain themselves while they were clearing and developing their blocks. The conditions of purchase were made very easy but considerable aggregation of holdings took place because settlers failed. Later, some of these large estates were re-purchased, subdivided, and the smaller farms made available to settlers under closer settlement schemes.

After each world war these schemes were expanded to enable ex-servicemen to acquire farms under generous terms of settlement. In addition, money was advanced to returned servicemen to enable them to buy their own "single unit" farms. Soldier settlers were also granted loans for the purchase of stock, plant, and equipment.

The State set up a Rural Finance Corporation with wide powers for assisting rural industry. This was later merged with the Soldier Settlement Commission into a Rural Finance and Settlement Commission.

The Commonwealth Bank has had a Rural Credits Department for many years. Its main function is to provide seasonal assistance in the marketing of products. Thus it cushions the effect of large interim payments at harvest time and provides credit for goods awaiting shipment or in transit. The Bank also administers the Farm Development Loan Fund, and assists in financing research. The Commonwealth Development Bank is interested in making loans available for the improvement of approved properties.

The trading banks have many farmer clients who require finance mostly on a relatively short-term seasonal basis. Numerous pastoral finance companies act as agents for farmers and frequently provide credit for the purchase of properties or for their improvement or for the purchase of livestock. The State Savings Bank also makes limited financial advances to farmers.

Rural Finance and Settlement Commission

The Rural Finance and Settlement Commission was established by legislation passed in 1961, which began to merge the former Soldier Settlement Commission and the Rural Finance Corporation. The new Commission carried out the functions of the previous authorities temporarily in two separate branches, namely, those of Settlement and Finance, respectively, until further legislation passed in 1963 completed the merger by removing this division and co-ordinating the functions previously performed by the two separate authorities.

Rural Finance Act

The Rural Finance Corporation was established in April 1950. Its functions, which have since been taken over by the Commission, include the making of advances through loans at low rates of interest to existing or proposed country industries, both primary and secondary. The Commission is also empowered to advance moneys to, or for the benefit of, any farmer for carrying into effect a composition or scheme of arrangement between him and his creditors. The Commission is also empowered under the Act to carry out special lending as agent of the Treasurer. Under these agency provisions, the Commission administers relief lending to members of the rural community in times of adversity such as bushfires, floods, and drought. (See also page 286.)

VICTORIA—RURAL FINANCE ACT: REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Revenue					
Interest	1,346	1,447	1,559	1,689	1,849
Other	34	30	42	23	38
Total revenue	1,380	1,477	1,601	1,712	1,887
Expenditure					
Administration	169	185	247	230	278
Interest	1,021	1,108	1,169	1,295	1,309
Sinking fund	56	59	61	66	68
Other	61	49	92	8	16
Total expenditure	1,307	1,402	1,569	1,599	1,671
Net surplus	73	75	32	113	216
Loans and advances outstanding at 30 June	24,113	25,123	27,641	27,330	29,099
Loan indebtedness to State Government at 30 June	22,128	22,881	24,451	27,527	26,395
Government agency advances made	260	252	3,144	3,447	823
Part III advances made	3,559	4,236	5,289	2,699	5,637
Government agency advances outstanding	1,215	1,353	4,291	6,412	6,203

General settlement

Before the end of the Second World War, the Commonwealth Government and various State Governments made arrangements for the settlement of discharged soldiers on the land as part of a general scheme of rehabilitation of ex-members of the services. In 1945 the Victorian Government completed an agreement with the Commonwealth Government. The State Parliament ratified the agreement and also passed legislation constituting the former Soldier Settlement Commission. Soldier settlement in all States has now reached the stage where no further allocations of blocks are proposed.

Under the Victorian legislation, soldier settlement was carried out under two separate schemes. First, there was the general settlement scheme where the Commission acquired freehold land or Crown land for subdivision and development into holdings for application by ex-servicemen. Such holdings were allocated on a competitive basis, having regard to the merits of all applicants. The number of ex-servicemen settled under this scheme totalled 3,293. Second, there was the single unit farm scheme, where ex-servicemen were granted loans up to a maximum of \$18,000 to assist them in the

purchase of existing farms of their own choosing. Under this scheme 2,878 ex-servicemen were granted loans amounting to \$23,917,338.

The Soldier Settlement Act enabled the Commission to make advances to general settlers and single unit farm settlers to assist them in the purchase of stock, plant, equipment, and shares in co-operatives. For this purpose \$12,586,333 has been advanced to settlers and at 30 June 1970, \$12,512,018 has been repaid and \$31,944 has been written off, leaving an outstanding balance of \$24,371. In addition to its functions under the Soldier Settlement Act, the Commission, on behalf of the Commonwealth Government, administered that portion of the Commonwealth *Re-establishment and Employment Act* 1945, which related to agricultural loans and allowances.

The following tables set out the particulars of rural rehabilitation of ex-servicemen in Victoria as at 30 June 1970 :

**VICTORIA—LAND ACQUIRED AND COST OF
DEVELOPMENT, 1945 TO 1970**

Particulars	Land acquired and total expenditure to 30 June 1970	
	acres	\$'000
Freehold land	1,193,171	39,448
Crown land	51,536	53,877
Development and improvement of holdings	..	..
	Total realisations to 30 June 1970	
	acres	\$'000
Sales of land not required for soldier settlement	65,046	(a)3,303

(a) Sale price of land not required for settlement.

VICTORIA—ADVANCES TO EX-SERVICEMEN, 1945 TO 1970

Act	Total advances to 30 June 1970		Advances outstanding at 30 June 1970	
	number	\$'000	number	\$'000
Soldier Settlement Act—				
Advances for settlers' lease liability(a)	3,033	57,406	1,949	34,072
Advances to assist in acquiring and developing single unit farms	2,878	23,917	1,069	7,198
Advances for improvements, stock, implements, etc.	n.a.	12,568	35	24
Advances for shares in co-operatives	327	250	..	..
Commonwealth Re-establishment and Employment Act—				
Advances to assist rehabilitation in farming industry	2,970	3,594	57	7

(a) The total number of settlers allocated holdings is 3,293 which includes 243 holdings re-allocated and 17 holdings disposed of.

n.a. : Not available.

Other land settlement

The *Land Settlement Act* 1959 extended the functions of the then

Soldier Settlement Commission in that, under such Act, the Commission was given authority to administer a new land settlement scheme to cater for those men wishing to become farm owners—many of whom were too young to have been ex-servicemen and thus eligible for soldier settlement. The scheme generally is based on the same principles as the scheme for soldier settlement—the main differences being the interest rates payable and the basis of determining the capital liability of the settler for the farm. There is no provision in the Act for advances to buy single unit farms. The Commission is given authority to purchase privately owned land or set apart suitable Crown land for development and subdivision.

Any male British subject over the age of 21 years is eligible to apply for land made available, but the actual allocation is made on a competitive basis, having regard to a number of factors laid down in the Act, including the applicant's experience in farming and prospects of success. A feature of the legislation is that the farms are either brought to, or within sight of, production before allocation. Further details about the general principles of this legislation will be found on pages 494–6 of the *Victorian Year Book* 1963.

Up to 30 June 1970 the land being developed for allocation under this scheme has been on five developmental projects. These are at Heytesbury near Cobden, Yanakie on Wilsons Promontory, the East Goulburn Project near Shepparton, Rochester irrigation project, and Palpara in the south-western corner of Victoria.

The Yanakie and East Goulburn schemes have now been completed and all farms allocated to settlers.

The demand for all holdings allotted to date has been exceedingly keen and the 573 farms allocated (381 dairy farms under rainfall conditions, 113 irrigation dairy farms, and 79 soft fruit orchard holdings) attracted more than 15,000 applications.

At 30 June 1970 the position of other land settlement in Victoria under the *Land Settlement Act* 1959 was as follows :

VICTORIA—OTHER LAND SETTLEMENT, 1959 TO 1970

Particulars	Land acquired and total expenditure to 30 June 1970		Balance outstanding at 30 June 1970	
	acres	\$'000	\$'000	
Land acquired—				
Freehold land purchased	24,425	2,068		
Crown land	126,880		9,570	
Development and improvement of holdings	..	26,564		
	Total realisations to 30 June 1970			
	acres	\$'000		
Sales of land not required for settlement	6,232	(a) 635	277	
	Total advances to 30 June 1970		Advances outstanding at 30 June 1970	
	number	\$'000	number	\$'000
Advances to settlers under the Land Settlement Act	n.a.	1,599	41	112
Liability of settlers granted purchase leases	469	14,956	467	14,164

(a) Sale price of land not required for settlement ; balance outstanding represents instalments not yet due where terms were given to purchasers.
n.a. : Not available.

Relief lending

In addition to its ordinary lending under the Rural Finance Act, the Commission is empowered to carry out special lending as agent of the Treasurer. Under these agency provisions it administers relief lending to the rural community in times of adversity such as bushfires, floods, and droughts. During the 1967-68 drought special funds were provided to Victoria by the Commonwealth for various drought relief measures including lending to drought affected farmers for carry-on and re-stocking purposes where the farmers had exhausted their capacity to borrow through normal sources of finance. Advances were made at an interest rate of 3 per cent per annum with a repayment term of up to seven years.

As a sequel to drought relief the Commission, at the request of the Government, initiated a scheme to provide finance to farmers and graziers to enable them to purchase oat silos and fill them if necessary; this was introduced as an encouragement to the man on the land to build up a fodder reserve against future adverse seasons. The number assisted was 803 involving \$720,344.

More frequently, the Commission has administered relief funds to vine and fruit growers, and other farmers in the Swan Hill-Mildura area, who suffered when hail and rain damage seriously reduced incomes. During the year assistance totalling \$353,280 was granted to 331 growers.

*Other rural finance facilities**State Savings Bank of Victoria*

State Savings Bank loans for rural purposes are available on the security of first mortgage over freehold property. Loans are repayable over periods varying between fourteen and a half and twenty-one years. Interest is charged at the rate ruling from time to time—in 1971 ranging from 6.75 to 8.25 per cent per annum depending on the amount of the loan and whether the property is worked by the applicant. The maximum loan must not exceed two thirds of the value of the property.

Particulars for the year ended 30 June 1970 may be found on page 660.

Reserve Bank of Australia—Rural Credits Department

The Rural Credits Department was established in 1925 as a department of the Commonwealth Bank of Australia, and is now part of the Reserve Bank of Australia. Its function is to provide finance to statutory marketing boards and similar authorities and to co-operative associations of primary producers. Advances are used by borrowers principally for making payments to growers for their primary produce pending its sale and to finance marketing expenses which in some cases include processing and packing of the commodity.

Finance for the marketing of wheat, and to a lesser extent, dairy products, has comprised the major portion of credit provided, but the Department's operations have also covered such commodities as barley, cotton, canning fruits, dried fruits, meat, eggs, and superphosphate.

Interest rates since 8 August 1969 have been 5 per cent per annum, if against the security of a Commonwealth or State Government guarantee; and 5.25 per cent per annum against other securities.

Grants have also been made by the Rural Credits Development Fund for research and extension work to assist the development of primary industries. The Fund is financed by one half of the annual net profits of the Rural Credits Department.

Farm Development Loan Fund

The Farm Development Loan Fund was established in 1966 to provide loans to primary producers, at preferential rates and conditions, for drought relief and farm development purposes. Loans are made by the trading banks from their Farm Development Loan Fund Accounts with the Reserve Bank, and are designed to supplement other loans available from the banking system.

Commonwealth Development Bank

A brief outline of the functions of the Commonwealth Development Bank, together with particulars of rural loans outstanding at 30 June 1970, may be found on pages 654-5. Rural loans are made for a variety of purposes, e.g., clearing, fencing, pasture improvement, farm water conservation, erection of essential farm buildings, and the basic stocking of properties. Other aspects of assistance granted include aid to successful applicants in government sponsored rural development schemes and land ballots. Special attention is also given to providing finance to applicants opening up new areas. Particulars of rural loans approved in Victoria during the year ended 30 June 1970 are given in the following table :

VICTORIA—COMMONWEALTH DEVELOPMENT BANK
OF AUSTRALIA : RURAL LOANS APPROVED, 1969-70
(\$'000)

Type of rural activity	Value of rural loans approved
Sheep	1,608
Dairying	1,305
Cattle	1,187
Wheat and other grain crops	77
Fruit	715
Poultry	552
Other	228
Total	5,672

The average loan approved for rural purposes during 1969-70 was \$12,862.

Advances by major trading banks

The extent of rural lending in Victoria by the Commonwealth Trading and other major trading banks is illustrated by the following table which shows bank advances to borrowers outstanding at the end of June for the five years 1966 to 1970 :

VICTORIA—COMMONWEALTH TRADING BANK AND PRIVATE
TRADING BANKS : BUSINESS ADVANCES OUTSTANDING TO
RURAL INDUSTRY BORROWERS
(\$m)

Industry of borrower	Amount outstanding at the end of June—				
	1966	1967	1968	1969	1970
Sheep grazing	49.2	61.5	76.4	82.2	81.0
Wheat growing	15.2	18.6	27.5	26.5	28.4
Dairy and pig raising	31.9	40.8	51.0	54.2	48.7
Other rural	22.9	29.8	38.1	44.7	50.9
Total	119.2	150.7	193.1	207.6	209.1

Advances to rural industry borrowers represented 21.5 per cent of trading banks' business advances outstanding at the end of June 1970, and 17.2 per cent of all advances outstanding. The maximum rate of interest on

bank overdrafts at 30 June 1970 was 8.25 per cent per annum but the average rate on rural loans would probably be below this level.

Advances of pastoral finance companies

The following table shows total rural advances outstanding to pastoral finance companies at the end of June for the five years 1966 to 1970 :

VICTORIA—RURAL ADVANCES (a)
OF PASTORAL FINANCE COMPANIES
(\$m)

At end of June—	Advances outstanding
1966	40.9
1967	50.2
1968	54.8
1969	65.9
1970	66.1

(a) Held by branches located in Victoria which is not necessarily the State of residence of the borrower.

Improvement purchase leases

Crown land can be made available for application under improvement purchase lease conditions and applications received are dealt with by a local land board.

The essential conditions of an improvement purchase lease are as follows :

1. That the lessee will make such land improvements within the first six years as are specified. "Land improvements" means the clearing, draining, or grading of land, the preparation of land for the sowing of crops and pasture, and soil improvement and maintenance.
2. That the lessee will commence to carry out the land improvements within one year and will complete one quarter within three years.
3. That the lessee will not sell, assign, or part with possession of the leasehold during the first six years.
4. That the lessee will not mortgage his interest in the leasehold during the first six years without first obtaining the consent of the Department.
5. That the lessee will reside in person on or within twenty-five miles of the leasehold during the first six years.

The purchase money is payable in twenty annual instalments and on satisfactory compliance with the conditions of the lease and on payment of the balance of purchase money and fees, a Crown grant will be issued at any time after the first six years except where the lease contains a soil erosion prevention condition. The period is then twelve years or such further period as is provided in the lease.

From the inception of improvement purchase leases in 1956 until 30 June 1970, 1,157 allotments comprising 350,786 acres of Crown land have been proclaimed available for settlement.

Water supply and land settlement

History

For practical purposes, the history of water supply in Victoria—outside the metropolitan area—can be taken up in the early 1880s when the miners who had left the goldfields to settle on the northern plains began to assess after a few exceptionally favourable years the true nature of the arid lands which they were pioneering. It was their agitation which led to the *Irrigation*

Act 1886 providing for elected local trusts to construct water supply works with government loan funds.

Between 1886 and 1900 about ninety Trusts were set up under this Act, but for a variety of reasons they all proved a failure. By 1900 the need for a State-wide approach to the water supply problem was apparent and in 1905 the Water Act was passed. This revolutionary Victorian Act, which has since provided the basis for practically all of the rest of Australia's water supply development, had three main features :

1. it abolished all but one of the Trusts (Mildura) and wrote off their debts ;
2. it set up the State Rivers and Water Supply Commission to develop and control water supply and conservation throughout the State, with the exception of the Melbourne metropolitan area ; and
3. it completed the nationalisation of water resources commenced in the 1886 Act and vested in the Crown the right to the use and control of the water in the State's rivers, streams, etc., thus avoiding the litigation which has clouded the history of water supply elsewhere.

Control of surface waters and other functions

One of the State Rivers and Water Supply Commission's main functions is to exercise the Crown's rights to the control and use of rural surface waters, and to act on any infringement of these rights. The Crown's interest is to see that limited resources are distributed fairly and productively between users. This is done by licences and permits for private diversions from streams, and by the apportionment of resources to authorities constituted under the Water Act.

The Commission also investigates water resources and plans works. It operates 390 gauging stations on streams and publishes the information obtained. Records of river flows date back to the 1860s. Investigation and planning require surveys, and there are thirty-five surveyors working from ten centres. Other Commission investigatory services are its Testing Laboratory and Water Research Section at Head Office and its Hydraulic Research Station at Werribee.

Ten year plan

The Premier announced a comprehensive programme of storage works in July 1963, the construction of which would be spread over the period 1964-1974. The estimated cost in 1964 was \$77m ; the equivalent in 1970 would have been \$110m. The original estimate included one quarter the share of Chowilla (\$11m on the 1964 base) and the second stage of Buffalo, estimated cost \$56.5m.

The projects included in the original programme were :

Devilbend Reservoir	Complete
Lake Bellfield	Complete
Buffalo Dam—first stage	Complete
Corop Lakes	Complete
Tarago Dam	Completed to about 20,000 acre feet. Enlargement to about 30,000 acre feet will be carried out in 1971-1972

Chowilla (one quarter share)	Deferred
Nillahcootie	Complete
Lake Merrimu	First stage complete
Lake Mokoan	Complete
Buffalo—second stage	Deferred. Dartmouth proposal will take priority

The original programme has been modified by the proposal to construct Dartmouth rather than Chowilla to provide additional supplies from the River Murray for Victoria, New South Wales, and South Australia. The construction of Dartmouth, if ratified by all Parliaments concerned, would make the inclusion of the second stage Buffalo project unnecessary for some years.

The Government has approved a further works programme which provides for the commencement of the following projects :

<i>Project</i>	<i>Estimated cost</i>
Lake Merrimu (second stage, i.e., inlet tunnel)	\$2.5m
Millewa Domestic and Stock Scheme—replacement of open channels by pipelines	\$2.5m
Lake Howitt Project (Mitchell River)	\$5.0m
Rosslynne Reservoir (Jacksons Creek)	\$3.0m
Dartmouth Dam (one quarter share River Murray Commission Project)	\$15.0m
South Otway Pipeline	\$3.0m
Bungal Dam (West Moorabool River)	\$4.8m

Construction of the Millewa scheme, the south Otway pipeline, and the Bungal Dam has already begun.

These works will provide additional security for existing rural developments and will allow the fast increasing urban demands in areas to the west of Melbourne to be met.

Commonwealth aid project

A storage on the King River (Lake William Hovell) received a Commonwealth Government grant of \$4m towards construction, which began in April 1969. The 10,000 acre feet storage was filled in May 1971.

The purpose of the dam is to provide assured supplies for irrigation, particularly of tobacco, in the King River Valley and will ultimately provide additional urban supply to the City of Wangaratta.

Groundwater Act

The Groundwater Act, which was passed in the autumn session of Parliament 1969 and proclaimed in September 1970, enables the Mines Department and the Commission to establish the administrative procedures necessary for the investigation, conservation, and utilisation of the groundwater resources of Victoria.

The Act gives the Mines Department authority to investigate the State's groundwater resources so that the State's total water resources and their proper use can be considered by the Government in the future.

Substantial progress has been made in the appointment of staff to administer the Act. The Groundwater Appeal Board has been appointed and will serve to protect the rights of the individual in the equitable distribution and use of groundwater resources.

Since the proclamation of the Act 1,182 applications for licences to extract groundwater for purposes other than domestic and stock use have been lodged with the Commission and over 3,000 bores from which water is extracted only for domestic and stock use have been registered.

A Groundwater Conservation Area has been declared in the Koo Wee Rup-Dalmore District. Over 200 bores are operated in the district for the irrigation of a total area of about 10,000 acres of pastures and miscellaneous cash crops and the volume of groundwater extracted annually exceeds the natural rate of replenishment of the aquifer. The groundwater level is falling steadily, leading to a deterioration in water quality in areas adjacent to the coast. Investigations are in progress to determine the safe volume which may be extracted annually.

Irrigation

Most irrigation is carried out in districts directly controlled by the Commission, although there is an increasingly large proportion of "private diverters", irrigators who are authorised to take water from streams, lakes, etc., but who do not come within the boundaries of an irrigation district. (See private irrigation below.)

A feature of the districts is the system of "water rights". Under this system a certain quantity of water is assigned to each district and allotted to the lands commanded and suitable for irrigation. The irrigators pay a fixed sum for this water each year, whether they use it or not, and also pay a general rate. The irrigators get this water right in all except the very driest years and they can also buy water in excess of the water right in most seasons. The water right system assures irrigators of a definite quantity of water each year, and the Commission can rely on fairly constant revenue to meet the cost of district operation. Water usage varies according to seasonal conditions and the water right system provides a constant minimum income.

A feature of Victorian irrigation policy has been the development of closer settlement by intensive irrigation, that is, by allocating relatively large quantities of water per holding instead of limiting the allocation of water to a portion of each holding. This has meant that Victorian irrigation is predominantly devoted to dairying, fruit, and vegetables, rather than to sheep raising. The advantage of intensive irrigation is that much higher returns are available from a given quantity of water and, consequently, a much greater rural population is supported.

Private irrigation

Private irrigation by diversion of water from rivers, lakes, etc., has increased in recent years. From 1942-43 to 1969-70 the area watered privately increased from 23,462 acres to 201,149 acres, the latter being 14 per cent of the total area irrigated. The number of private diversions authorised during 1969-70 was 10,660 and the water delivered was used mainly to produce annual and perennial pastures and fodder, as well as potatoes, tobacco, hops, citrus, and cotton. About half the area privately

watered is supplied from streams regulated by storages, the other half being from streams wholly dependent on rainfall. Many private storage dams are being built, frequently at substantial cost, on individual properties to insure against low flows in the streams normally used.

Major storages devoted principally to irrigation are shown in the following table :

VICTORIA—MAJOR IRRIGATION STORAGES

River	Irrigation storages	Capacity	Principal system or district served
		acre ft	
Goulburn	Lake Eildon	2,750,000	Goulburn-Loddon
	Waranga Reservoir	333,400	" "
	Greens Lake	26,550	" "
	Goulburn Reservoir	20,700	" "
Campaspe	Lake Eppalock	252,860	" "
	Cairn-Curran Reservoir	120,600	" "
	Tullaroop Reservoir	60,000	Maryborough town supply; private diverters; and Goulburn-Loddon System
Broken	Lake Nillahcootie	32,260	Broken River Valley; private diverters
Murray	Lake Hume	(a) 1,240,000	Murray
	River Murray Weirs	(a) 111,575	"
	Kow Swamp	40,860	"
Macalister	Lake Glenmaggie	154,300	Macalister
	Lake Buffalo	19,500	Wangaratta town supply; private diverters; Ovens Valley
Werribee	Pykes Creek Reservoir	19,400	Bacchus Marsh District
	Melton Reservoir	13,900	Werribee District
	Lake Merrimu	15,000	Bacchus Marsh District
		(b) 5,210,905	

(a) Victoria's half share under the River Murray Agreement, subject to certain obligations to South Australia.

(b) In addition to the storages named, there is a system of natural lakes in the Kerang-Swan Hill Area forming part of the Torrumbarry System. The Coliban River storages are used for both irrigation and town supply around Bendigo and Castlemaine. A limited irrigation area is also supplied from the Wimmera-Mallee System.

Town supplies

The Commission operates major works for town water supplies outside the Melbourne metropolitan area—the Coliban System supplying Bendigo, Castlemaine, and other towns in that area; the Mornington Peninsula System supplying towns extending from Longwarry to portion of Dandenong, the bayside towns from Seaford to Portsea, the Western Port towns from Hastings to Flinders, and the township of Wonthaggi; the Bellarine Peninsula System supplying water to the towns extending from Portarlington to Anglesea; and the Otway System supplying water from the Otway Ranges to Camperdown, Cobden, Terang, and Warrnambool. The total towns supplied by the Commission are 148 and their total population is 248,220. (For other town supplies and sewerage see page 221.)

Millewa pipeline project

In the far north of Victoria, a major water pipeline scheme is under way in the dry and sandy Mallee country west of Mildura. It will

VICTORIA—AREA OF SYSTEMS AND LANDS IRRIGATED, AND WATER DELIVERED, 1969-70

System or District	Total area within constituted district	Area irrigated								Water deliveries
		Pastures		Lucerne and sorghum	Vineyards	Orchards	Market gardens	Others	Total	
		Native	Sown							
		acres	acres	acres	acres	acres	acres	acres	acres		acre ft
River Murray System— Torrumbarry System (a) Murray Valley Area Pumped Supply Districts (b)										
	386,439	14,094	238,409	9,605	4,279	1,795	796	15,103	284,081	320,000
	301,691	306	106,408	6,914	61	6,637	337	1,308	121,971	227,609
	74,781	294	325	1,162	40,255	3,010	139	2,445	47,630	142,140
Total River Murray	762,911	14,694	345,142	17,681	44,595	11,442	1,272	18,856	453,682	689,749
Goulburn-Loddon System Macalister District Werribee-Bacchus Marsh Other northern systems Other southern systems Private diversions										
	1,327,070	26,708	520,348	33,418	359	20,636	4,395	36,492	642,356	898,919
	130,476	980	59,040	324	..	..	98	..	60,442	59,729
	16,231	..	5,833	775	..	624	3,902	276	11,410	17,284
	n.a.	521	13,287	1,185	1	2,857	415	111	18,377	38,482
	n.a.	5,231	148,964	16,221	2,592	4,198	15,384	139	1,596	387,539
Grand total	(c) 2,236,688	48,134	1,092,614	69,604	47,547	39,757	26,923	64,433	1,389,012	2,091,702

Source : State Rivers and Water Supply Commission.

(a) Includes 15,225 acres irrigated by private diversion.

(b) Including First Mildura Irrigation Trust (18,559 acres irrigated), supervised by the Commission.

(c) Incomplete.

n.a.: Not available.

bring reticulated water under pressure to farms and townships in the 441,000 acre Millewa district, now served by open channels. Some \$2.5m will be spent on the work, being carried out by the State Rivers and Water Supply Commission and scheduled for completion in 1975; it is the largest rural pipeline reticulation scheme yet undertaken in Victoria.

The wheat and sheep farms of the Millewa region cover some of the hottest and driest land in the State. At present, evaporation and seepage take a heavy toll of the water delivered to farms and towns through 388 miles of Commission channels and 230 miles of landowners' channels. By preventing this loss, the new pipeline scheme will save up to 7,500 acre ft of water a year.

The pipeline scheme followed an inquiry by the State Development Committee in 1965. In addition to saving water, it will avoid an estimated expenditure of \$400,000 on urgently needed reconstruction work on the present system, now nearing the end of its useful life. Surveying began in October 1969, and stage one (the Werrimull main and the Bambill South storage) was completed in 1970. A further four stages will see the installation by 1975 of distribution pipes to all individual farms. The first reticulated supply—to the settlement of Yarrara—should be flowing by mid-1972.

Farmers in the Millewa area will benefit in many ways from the new pipeline scheme. Instead of the annual filling of farm dams with water to last a full year, they will now have reticulated water constantly on tap. The extra water (now lost through evaporation and seepage) will mean that livestock carrying capacity can be increased, while maintenance costs for the Commission and the landowner will be reduced to a minimum.

Water for the Millewa domestic and stock system is pumped from the River Murray at Lock No. 9, and carried by channel to Lake Cullulleraine, north of Werrimull. Under the present system, it is pumped from the Lake to four higher points, for distribution by gravity throughout the region. When the new scheme is completed, water from Lake Cullulleraine will be pumped to a reservoir at Bambill South, a few miles west of Werrimull. This earthen storage, completed in October 1970, holds 40 million gallons of water, and is filled through 12 miles of 12 inch diameter rising main from Werrimull. A special pipelaying machine was used in May 1970 to lay this main in only 13 days. From the Bambill South storage, water will be distributed through 336 miles of 10 inch diameter pipeline to 123 holdings and two townships in the Millewa area.

Lake William Hovell

Lake William Hovell dam, under construction by the State Rivers and Water Supply Commission, will safeguard irrigation along the King River in northern Victoria. The 10,000 acre ft reservoir will supply water to irrigators producing tobacco, hops, milk, and beef cattle from Whitfield to Wangaratta, and will allow the irrigated area to be substantially increased. Set in heavily timbered virgin bushland, the William Hovell dam is being built 45 miles south of Wangaratta, in a narrow gorge at Horseshoe Bend, some 13 miles upstream of Whitfield township. Construction was officially proposed in 1966 and work began some two and a half years later. It was completed towards the end of April 1971 and was full within 14 days.

The cost, estimated at \$4m, is to be met by a Commonwealth grant.

Steep, thickly timbered slopes surround Lake William Hovell, which is likely to become a popular boating and picnicking spot. The catchment area, with an average annual rainfall of 56 inches, covers 141 sq miles and is located entirely in rugged, mountainous country—all Crown land, and mostly forest reserve. The reservoir will have an initial capacity of 10,000 acre ft, with provision for future enlargement if necessary to 120,000 acre ft in order to provide extra water for areas beyond the King and Ovens river valleys. The water level of the present reservoir will be 1,340 ft above sea level, with a maximum water depth of 100 ft.

The King River rises on the northern slopes of the Great Dividing Range near Mount Howitt. It flows through forested mountain country north-westerly and then northerly, before passing into a wide valley of fertile flats which extend through Cheshunt and Whitfield to the confluence of the King and Ovens Rivers at Wangaratta.

The valley's products depend on irrigation water pumped from the river. Although natural stream flow is large, it is concentrated in the winter and spring months, when least needed for irrigation. In summer, low flows are frequent; on several occasions the flow has ceased altogether for two to three weeks, and, in severe droughts, has remained low for up to three months. During summer and autumn, therefore, irrigators have been subjected to grave financial risk because of the lack of an assured supply, but this problem should be overcome by the new dam. As an additional benefit, the regulated flow from the storage will also replenish groundwater available on the river flats.

The earth and rockfill embankment, located on a narrow spur forming the inner section of a horseshoe bend of the river, will be 105 ft high and 1,350 ft long. A 400 ft long, 15 ft diameter diversion tunnel, driven through the rocky spur for diversion of the river during construction, will be used for the outlet works in association with a 100 ft high outlet tower. A concrete spillway will lead excess or flood water back to the river through a concrete-lined chute.

Lake William Hovell can be operated to reduce the size of minor floods but its effect on larger floods, which occur every three or four years, is likely to be negligible.

Finance

Acting as a government authority, the Commission constructs its works with funds provided for the purpose by Parliament, amounting by 30 June 1970 to \$330m including contributions by the State of Victoria towards works carried out for the River Murray Commission. A further \$81m of government loan moneys has been provided for expenditure by local authorities under the supervision of the Commission. In recent years the rate of expenditure on construction of State works has been about \$13m annually, and the Commission also supervises the expenditure of about \$5.5m annually by local authorities.

The Commission administers, supplies water to, and collects revenue from nearly 120 separate districts, each of which is run financially as a

separate undertaking. Revenue from its ten irrigation districts exceeds \$5m ; from its urban districts about \$2.5m ; from its ten rural waterworks districts about \$1m ; and from its three flood protection districts about \$100,000 ; the total annual revenue, including other sources, is over \$10.4m.

Administration

The Commission is served by a decentralised organisation designed to carry out diverse functions all ultimately related to water. Central administrative, engineering, and clerical functions are carried out by a staff of 560 in the head office at Armadale. At the many country centres throughout the State there are 1,050 other officers and some 1,400 casual employees. Together they are engaged in planning, building, maintaining, and operating waterworks vital to the prosperity of rural Victoria.

Irrigation, 1962 ; Wimmera-Mallee region water supply, 1963 ; Flood protection, river improvement, and drainage, 1963 ; Underground water, 1964 ; Water supply in Victoria, 1964 ; Goulburn-Murray Irrigation District, 1965 ; Spray irrigation in agriculture and dairying, 1965 ; Private irrigation development, 1966 ; Water Research Foundation, 1966 ; River improvement, 1967 ; Rivers and streams fund, 1967 ; Dandenong Valley Authority, 1968 ; Water conservation, 1969 ; Water supply to Western Port 1971

River Murray Agreement and the River Murray Commission

1914 Agreement

The River Murray Agreement in its original form was concluded on 9 September 1914 between the Prime Minister of the Commonwealth of Australia and the Premiers of the three States of New South Wales, Victoria, and South Australia. The Agreement was subsequently ratified by the four Parliaments and came into force in the following year. It provided for the construction of works to regulate and use the waters of the river for irrigation, other water supply purposes and navigation, the allocation of water between the three States, and the formation of the River Murray Commission, a body charged with the duty of giving effect to the Agreement and the Acts of ratification.

Provision was made for construction of a system of storage on the Upper Murray at "Cumberoona or some other suitable site or sites". In the event the Cumberoona site was abandoned in favour of a location some six miles downstream, not far below the junction of the River Murray and the Mitta Mitta River ; an expanse of 56,000 acres, now known as Lake Hume. A second system of storage was authorised at Lake Victoria, an off-river site in New South Wales between Wentworth and the South Australian border.

Provision was also made for weirs and locks, for navigation and water supply purposes, in the course of the river from its mouth to Echuca, at one time a river port of commercial importance. Similar provision was made for weirs and locks in the course of the Murrumbidgee River from its confluence with the Murray to Hay, or, alternatively, at the discretion of the New South Wales Government, in the Darling River upstream from its confluence with the Murray at Wentworth, and involving equivalent expenditure. In the event, of the 26 weirs and locks then contemplated on

the Murray, those numbered 1 to 11 were built between Blanche Town (S.A.) and Mildura (Vic.), No. 15 at Euston (N.S.W.), and No. 26 near Torrumbarry (Vic.), not far downstream from Echuca. Arising from the progressive decline of river traffic from 1896 onward, structures numbered 12, 13, and 14 were not built, nor were those numbered 16 to 25 between Euston and Torrumbarry.

New South Wales elected for the development of the Murrumbidgee, but the only structures built between 1936 and 1940 were at Maude and Redbank. Locks were not provided at these two weirs because river traffic on the Murrumbidgee had then ceased.

The 1914 Agreement allocated the cost of works (then estimated at \$9,326,000) as \$2,000,000 to the Commonwealth and the balance equally between the three States (\$2,442,000 each), or in these proportions applied to actual costs. The responsibility for construction of specific works was allocated to the States with costs of maintenance to be borne by the State undertaking construction.

The water allocated to South Australia was a normal minimum of 1,254,000 acre ft per annum in specified monthly volumes, with the upper States sharing the regulated flow at Albury and reserving the flow of their tributaries below Albury for their own use, subject, of course, to satisfaction of South Australia's entitlement. These provisions remain unchanged.

The responsibility between the upper States for meeting South Australia's entitlement was in the proportions— $T + \frac{A}{2}$, where "T" denotes the mean annual *natural* flow of tributaries to the Murray below Albury from the particular State and "A" the mean *actual* flow at Albury. This was subsequently varied in 1948 to provide for equal sharing of the obligation. An original provision for filling Lake Victoria once per annum was dropped in 1963.

1923 Amendment

During 1923 a provision was inserted to give priority to works intended for irrigation as against those primarily for navigation; a somewhat belated recognition of declining river traffic. It was also agreed that the cost of works would be shared equally by the four Governments, a concession by the Commonwealth in favour of the States. At this time Weir and Lock No. 1 at Blanche Town had been completed and work on Hume dam, commenced in 1919, was actively proceeding.

1934 Amendment

This variation was generated in a period of economic depression, with public works expenditure severely restricted. At this time eleven more weirs and locks had been completed, or almost so, while Lake Hume, designed to impound 2,000,000 acre ft, was being filled for the first time. The Governments agreed to limit the capacity to 1,250,000 acre ft (thus postponing the cost of removing the town of Tallangatta), but with works provision to permit later extension to the designed capacity.

The number of weirs (or weirs with locks) was reduced from twenty-six to fourteen in the River Murray and limited to two on the Murrumbidgee.

The upstream limitation for weirs and locks at Echuca was removed in order to permit construction of a large weir at Yarrawonga, completed in 1939, to serve large areas subsequently developed for irrigation in both the upper States.

South Australia obtained agreement for the construction of the interesting Murray Mouth Barrages to link a series of islands in Lake Alexandrina, a short distance in-shore of the river mouth. The purpose of these structures, completed in 1940, is to prevent the ingress of sea water for a distance upstream of 170 miles to Weir and Lock No. 1 at Blanchetown.

The four Governments agreed to meet the cost of the re-scheduled works programme up to, but not exceeding \$24m, a considerable increase on the 1914 figure. Arrangements were also made for the cost of maintenance of works, wherever situated, and expenses for river gauging, to be shared equally by the three States.

Remedial action

In February 1939, following rapid drawn-down of Lake Hume because of dry conditions, a section of the main embankment subsided and the upstream protective concrete facing was destroyed over a length of about 1,200 ft. Work was commenced to stabilise the bank and to protect the exposed filling from wave action. By July 1942 some 600,000 cubic yards of stone had been placed, mostly from barges. This was successfully tested in April 1944 when the reservoir was again drawn down because of very severe drought conditions, only about 1 per cent of the capacity remaining at the lowest water level stage.

1948 Amendment

Provision was included in this amendment for Hume dam to be completed to impound 2 million acre ft, as previously intended, and for enlargement of the inlet channel to Lake Victoria from Weir and Lock No. 9 to a capacity of 6,000 acre ft per day. A degree of catchment management was introduced for lands in New South Wales and Victoria draining to Lake Hume, and the Commission was authorised to carry out investigations. At this time Victoria was interested in a weir adjacent to the off-take of the Marraboor (or Little Murray) effluent above Swan Hill. To facilitate this, provisions were inserted to permit the contracting Governments authorising the construction of mutually-agreed additional works by one or more of the contracting Governments, with sharing of capital and maintenance costs also by arrangement. In the event the Marraboor Weir proposal did not eventuate, the diversion required for the adjacent irrigation area being achieved by pumping.

Provision was made for a reserve of 750,000 acre ft to be kept in storages for use only in drought, and rules were introduced for sharing of the water available for use on these occasions in, for practical purposes, the proportion of five parts to each of the upper States and three parts to South Australia. The upper level of expenditure was raised to \$28m and, as mentioned earlier, it was agreed that the obligation for water passed to South Australia would be shared equally by New South Wales and Victoria.

Snowy Mountains Scheme

In 1949 legislation was enacted to authorise, under the defence power of the Commonwealth, construction of this very large hydro-electric project involving, among other things, the inland diversion of waters of the Snowy River at Jindabyne to the Swampy Plain River near Khancoban, thence to the River Murray at Bringenbrong. Provision was also made for the diversion of the smaller Tooma River, a tributary to the Murray below Bringenbrong, to the Tumut, which flows to the Murrumbidgee.

At the time it was envisaged that the net increment of water coming to the Murray, that is, the difference between the volumes received from the Snowy and those taken from the Tooma, would be shared between New South Wales (three quarters) and Victoria, with no water for South Australia. It was also envisaged that a balancing storage of some 250,000 acre ft would be provided between Lake Hume and Khancoban in order to regulate waters coming from the Snowy during the winter and spring for use during the following summer and autumn. All this had a significant bearing on subsequent events.

1954 Amendment

The post-war period up to this time had been one of much investigational activity. One of the significant conclusions was that the capacity of Lake Hume could be increased to $2\frac{1}{2}$ million acre ft at a relatively modest cost, and that half of the increment of capacity between 2 and $2\frac{1}{2}$ million acre ft (that is, 250,000 acre ft) could be regarded as the storage necessary to regulate diverted Snowy waters.

This was given legislative sanction by the Commonwealth and three State Governments. The upper level of estimated expenditure was raised to \$39.5m in four equal contributions, with the proviso that any amount coming available from the Snowy Authority would be disbursed in equal parts. At the same time provision was made for works between Tocumwal and Echuca to prevent the loss of regulated flow into the many channels which break out of this reach of the main stream into New South Wales and concentrate in the Edward River near Deniliquin. Arising from the increased storage capacity the drought reserve was raised to one million acre ft.

1958 Amendment

At this time the arrangements for diversion of the Tooma River away from the Murray were threatened by a writ out of the High Court by South Australia moving to restrain action. This difficulty was overcome by New South Wales and Victoria each accepting a debit against their shares of the flow at Albury equal to half the diverted quantities, with Victoria's half being replaced into the River Murray via the Murrumbidgee. Quite detailed machinery was also provided for the distribution of water to the three States during a declared period of restriction. These were tested during the 1965-66 dry period and the 1967-68 drought and proved satisfactory. These provisions embodied the important principle that "Murray water" included water received from the Snowy *less* the smaller volumes taken from the Murray by the Snowy Authority's Tooma diversion works.

In order to resolve doubts as to the validity of the defence powers of the Commonwealth to build the Snowy works, and for other reasons, an Agreement regarding these works was reached between the Commonwealth, New South Wales, and Victoria. This was subsequently ratified by the three Parliaments.

1963 Amendment

This embodied provision for the somewhat controversial Chowilla storage of about 4½ million acre ft between Renmark (S.A.) and Wentworth (N.S.W.), the cost estimate for all works being raised to \$72m, a figure which provided some \$28m for the Chowilla project. At the same time the Governments concluded the Menindie Lakes Agreement which made available the waters of these Darling River storages for the purposes of the River Murray Commission, with a reservation of 90,000 acre ft annually by New South Wales for use between the storage outlets to the Darling, the Ana Branch of the Darling, and the River Murray. This was for a seven year period ending 31 December 1969, but has been extended by mutual agreement.

Subsequent events

Preliminary work, including a detailed investigation, was put in hand at the Chowilla dam site; plans and specifications prepared; and tenders invited by the Government of South Australia as constructing authority through its Engineering and Water Supply Department. After consideration of tenders received it became evident that the project would cost an estimated \$68m. In addition, the previously assessed benefits were substantially reduced by an increased evaporation penalty arising from a larger storage area than previously envisaged. Further reduction arose as a result of experience during the 1965-66 dry period in controlling rising salinity levels. It was found necessary to allow a minimum flow of about 900 cu ft per second to pass downstream through the Mildura reach to the pool formed in the Murray by Weir and Lock No. 10 at Wentworth.

In May 1967 the River Murray Commission agreed to defer further work on the project for the time being and engaged the Snowy Mountains Authority in a consultative capacity to make an investigation of alternative sites in the catchment above Albury. This led to the development in 1968 of the Dartmouth Reservoir proposal on the Mitta Mitta River, a 3 million acre ft storage impounded by a dam nearly 600 ft high with an estimated cost of \$64m in 1971.

Formal agreement between the four Governments was signed late in February 1970. At the same time provision was made for South Australia's annual minimum entitlement to be increased by about 20 per cent to 1.5 million acre ft and for specified minimum flows at Weirs and Locks Nos. 15 and 26 in order to keep salinity within tolerable limits. Agreement was also reached to perpetuate the expired Menindie Lakes arrangement; but with provision for a New South Wales reservation slightly increased to 100,000 acre ft per annum. In return, Victoria agreed to cede 45,000 acre ft per annum of its tributary flow below Albury to New South Wales.

This agreement was ratified later in 1970 by the Parliaments of the Commonwealth, New South Wales, and Victoria and in August 1971 by the Parliament of South Australia.

Finally, the four Governments received during 1970 a comprehensive report dealing with the salinity problem in the River Murray, the salinity increasing in severity with progression downstream from Swan Hill to the pumps supplying Adelaide at Mannum. This report was prepared for the River Murray Commission by Gutteridge, Haskins and Davey, consulting engineers, in association with Hunting Technical Services, who provided the expert knowledge on agricultural aspects. This is an important milestone in the development of the river system, particularly for South Australia, the State which suffers most from the rising salinity levels.

Expenditure

The total capital expenditure in respect of construction of works was \$54,503,564 at 30 June 1970; the contribution by each Government being \$13,625,891. For the year ending June 1970 the costs of operation and maintenance of completed works and gauging stations (\$1,319,488) was met by contributions from each of the three States of \$403,000 and reduction of bank balance by \$110,488. Against this, each State received a credit of about \$9,000 from revenue coming from the sale of water for electricity generation at Hume dam and rentals of land. Administrative expenses were \$48,333, financed by contributions of \$10,500 by each of the four contracting Governments and reduction of bank balance by \$6,333.

AGRICULTURAL EDUCATION, RESEARCH, AND EXTENSION SERVICES

Tertiary agricultural education

Agricultural colleges

The legislation of 1884 which provided for the establishment of agricultural colleges set up a Council of Agricultural Education for their administration. Its revenue was derived from the rentals of endowment lands, sales of farm produce, and student fees, and it continued to administer the Colleges until 1944 when, with the passing of a new Agricultural Colleges Act, control was transferred to the Department of Agriculture in which a new Division of Agricultural Education was established. This move has provided adequate finance for maintenance and capital expenditure, the latter including a complete rehabilitation programme for both Dookie and Longerenong Agricultural Colleges in the period from 1959 to 1969.

The main purpose of the Colleges is to train agricultural technologists in the basic technical and scientific principles underlying all aspects of agriculture. Lectures on all topics are complementary with demonstrations, tours, laboratory work, and practical farm work, the latter being given on large farm areas attached to each College—6,048 acres at Dookie and 2,386 acres at Longerenong. Although the emphasis is placed on training technologists to assist in agricultural research and extension, intending farmers will gain a sound technical and scientific background to enable them to make use of modern agricultural and economic developments in operating their own properties.

In 1966 a revised syllabus was introduced at Dookie and Longerenong and after successful completion of the three year course, students gain a Diploma of Agricultural Science. The minimum entrance standard is a pass in five subjects including English and Chemistry at the Leaving or Leaving technical examination. In practice, however, it is found that most students have completed one year at Higher School Certificate level.

The development of post-secondary education in all technical fields which has taken place since 1967 has made it desirable that the agricultural colleges raise the entrance standard to the Higher School Certificate level, as has been done in other Australian States. The colleges would then offer an Associate Diploma in Agricultural Science, but it is anticipated that this will not be effected before 1973. A third agricultural college at Glenormiston, opened in 1971, provides a two year course in production and management for the future farmer.

Short intensive courses for farmers, farmers' sons, and others engaged in rural pursuits are provided at Dookie Agricultural College.

In 1967 the three year course for the Diploma of Horticultural Science was introduced at the Burnley Horticultural College, with the same pre-requisite entrance requirements as for the agricultural colleges. This replaced the Diploma of Horticulture course introduced in 1958. The new course is comprehensive, giving tuition and practical experience in fruit and vegetable production, ornamental horticulture, nursery management and landscape design, as well as training in the basic physical, biological, and applied sciences.

Part-time evening classes in horticultural, agricultural, and associated science subjects are also conducted at Burnley. The Agricultural Education Division also administers the government grant to the Victorian Young Farmers.

University of Melbourne School of Agriculture

The Faculty of Agriculture was established in 1905 by statute of the Council of the University and the first Professor of Agriculture, Dr Thomas Cherry, was appointed in 1911. However, it was not until 1921, following the passing of the *Agricultural Education Act 1920*, that provision was made for a building to house the school and for the appointment of permanent staff.

The purpose of the four year course is to give students a sound basic training in scientific principles as applied to agriculture. The first year is devoted to science subjects and is followed by a year in residence at the University Field Station at Mount Derrimut, Deer Park. This is a property of 800 acres, about 13 miles from the School, where students are introduced to the variety of farm operations involved in a mixed farming enterprise, while taking lectures and practical classes in various sciences applied to agriculture. They return to the University campus for more advanced training in the soil, plant, and animal sciences and economics in the third and fourth years of the course. In the final year the students have a restricted choice of subjects which allows a measure of specialisation while ensuring that all students receive a general training in all aspects of agricultural science.

Since the establishment of the Faculty of Agriculture 1,000 graduates have entered the profession. A quota of 70 is placed on the numbers in the first year of the B.Agr.Sc. course and the number of graduates averages about 55 per annum. There are some 30 students working for higher degrees (Ph.D. and M.Agr.Sc.) either at the University or at Mount Derrimut and ten postgraduate students attend the course for the Diploma in Agricultural Extension. Buildings and facilities are provided at Mt. Derrimut Field Station for training students and for research in the soil, plant, and animal sciences. This has been made possible by generous grants from primary industry funds and from the State and Commonwealth Governments.

Bureau of Agricultural Economics : activities in Victoria

The Bureau of Agricultural Economics was established in July 1945 to meet the need for a Commonwealth research body in the field of agricultural economics and rural policy. No administrative functions are vested in the Bureau; it is specifically a service institution charged with the duty of undertaking research and making the results available to all concerned, including Commonwealth and State departments, semi-government and private institutions, and individuals.

As a Commonwealth body, the Bureau is concerned with agricultural problems and policies primarily on a Commonwealth-wide basis. Its activities in the States are largely parts of wider Commonwealth studies and investigations. It does, however, carry out specific investigations requested by State authorities. In Victoria these have included a study of the water requirements in relation to irrigated dairy farms and prime lamb producing farms in the Tongala-Stanhope irrigation district, two examinations of the economic aspects of the processed tomato industry, an economic assessment of the mechanical harvesting of tobacco, and evaluation of projects being considered under the National Water Resources Programme including the King River and Mitchell River dams and the Millewa Stock Water Supply Scheme.

Generally, the activities of the Bureau in Victoria have taken the form of surveys of the structure of the various rural industries. Frequently these have been carried out in conjunction with the Victorian Department of Agriculture. The most important of these have included the following :

1. Dairy industry

(a) A study of the costs, incomes, and management problems of dairy farms in Victoria. This study, carried out in 1954, covered commercial butter producers in the main dairying districts.

(b) An economic survey of the dairy industry in 1964. This study involved both the wholemilk and the manufacturing sectors of dairy production in the main producing areas and covered the period 1961-62 to 1963-64.

2. Wheat industry

Five surveys of the economic structure of the wheat industry have been undertaken by the Bureau since its inception, the last survey being in respect of the three seasons ending 1966-67. Results of these investigations have

provided basic data for negotiations with the industry in the implementation of subsequent stabilisation schemes.

3. Sheep industry

(a) The economic structure of the Victorian sheep industry is being investigated as part of the Bureau's survey of the Australian sheep industry which has been carried out on a continuing basis since 1952-53 up to and including 1969-1970. The sample embraces properties carrying 200 sheep or more and for Victoria distinguishes properties in two zones: the wheat-sheep and high rainfall.

(b) A study of the profitability of different farm management practices in the Hamilton area of the Western District of Victoria, covering the six year period from 1957-58 to 1962-63.

(c) A study of the prime lamb industry in Victoria is to be undertaken by the Bureau as part of a wider study to obtain details of the economics of prime lamb production.

4. Dried vine fruit industry

(a) A survey of the Australian dried vine fruits industry was carried out in conjunction with the State Departments of Agriculture in New South Wales, Victoria, and South Australia. Areas covered in Victoria included the Robinvale, mid-Murray, and Sunraysia districts.

(b) Further surveys covering the same districts were carried out covering the three years ending 1962-63 and 1967-68 to provide basic information for the establishment of stabilisation schemes requested by the industry.

(c) A continuous study of a sample group of dried vine fruit specialists in Sunraysia was carried out over the three year period 1958-59 to 1960-61.

(d) A study of the economics of artificial rack drying in vine fruits.

Other investigations carried out by the Bureau which have included Victoria as an area of study have covered surveys of the following industries, some on more than one occasion: commercial egg production, wine grapes, beef cattle, canning fruits, berry fruits, citrus fruits, apples and pears, pigs, potatoes, and a study of water diversion by private pumping from the Lower Murray River.

Many of the other activities of the Bureau are of importance for Victoria; these include the publication of various commodity situation reports such as *The Wheat Situation*, *The Wool Outlook*, and *The Dairy Situation*, which review home and overseas developments affecting the outlook for these major commodities and the publication from time to time of special reports such as the *Statistical Handbook of the Sheep and Wool Industry* and *The Economics of Fattening Store Cattle by Dry-Lot Feeding*. The Bureau also carries out more general analyses which are of interest to Victoria as well as other States. These include examinations of the effects of economic policies, conditions, and developments (at home and abroad) on Australian rural industries, or trends in Australian farm production, cost, and incomes, and of the economics of rural development projects.

Further reference, 1966; Farm management, 1967; Agricultural extension services, 1968; Size distribution of rural holdings, 1969; Research and extension activities of the Department of Agriculture, 1970; Application of scientific research to agriculture, 1970; Research stations of the Department of Agriculture, 1971

FARMING

General

Collection of statistics

Before 1904 the statistics were collected by the municipal authorities who were required by statute to furnish information on such forms and in such manner as was required by the Governor in Council. During the period 1904 to 1966 police officers were required to collect agricultural, pastoral, and dairying statistics from land-holders in Victoria. Commencing with the 1966-67 Farm Census, the collection of these statistics has been carried out on a direct postal basis.

The Bureau made an intensive coverage check of its listings of land holdings used in the collection of agricultural and pastoral statistics in Victoria, and these were reconciled with lists of rateable land of one acre or more in extent, as recorded by municipalities for rating purposes. As a result, 6,975 holdings totalling 1,462,229 acres were added to the annual collection as from the 1967-68 season. This change in coverage should be kept in mind when comparing figures for 1967-68 with those for previous years.

The rural statistics contained in this part are mainly compiled from annual returns of agricultural, pastoral, and dairying production collected from some 70,000 rural holdings in Victoria at 31 March each year. Statistics from these schedules are compiled for each county and local government area.

Every holding of 1 acre and upwards used for the production of agricultural products or for the raising of livestock and the production of livestock products is required to supply full particulars of the area occupied, the rural population, the number of persons employed, the area and yield of each kind of crop cultivated, artificial fertiliser usage, numbers of certain items of farm machinery, the number and description of livestock, the quantity of wool clipped, and other relevant matters.

Data relating to area sown, production, yield per acre, and number of holdings growing crops are for the season ended 31 March, thus including crops which are sown and harvested, or harvested, during the twelve months ended 31 March.

In cases where harvesting of certain crops has not been completed by 31 March (potatoes, fruit, vines, etc.), supplementary collections are made later in the year.

Livestock numbers, farm machinery on rural holdings, and the number of persons working are reported at 31 March, while wage and salary payments relate to the twelve months ended 31 March.

Summary of Australian statistics

The following table, which summarises the principal farming activities

in Australia during the 1969-70 season, shows the position of farming in Victoria relative to other States :

AUSTRALIA—PRINCIPAL ITEMS OF FARM ACTIVITY, 1969-70

Particulars	N.S.W.	Vic.	Qld	S.A.	W.A.	Tas.	N.T. and A.C.T.	Australia
Rural holdings—								
Number	75,908	69,498	43,829	29,035	22,937	10,159	516	251,882
Area ('000 acres)	170,630	39,057	380,218	162,692	280,819	6,517	182,455	1,222,388
Principal crops—								
Wheat—								
Area ('000 acres)	8,623	3,298	1,504	3,210	6,788	15	3	23,440
Production ('000 bushels)	162,786	83,544	14,898	59,159	66,700	353	73	387,512
Oats—								
Area ('000 acres)	903	884	75	372	1,139	22	1	3,396
Production ('000 bushels)	19,238	25,927	950	6,665	15,463	455	25	68,723
Barley—								
Area ('000 acres)	542	487	417	1,384	900	30	..	3,759
Production ('000 bushels)	12,335	11,373	7,587	30,454	12,059	1,096	..	74,901
Hay—all types—								
Area ('000 acres)	748	1,200	180	384	500	172	7	3,192
Production ('000 tons)	1,406	2,466	373	608	508	365	11	5,737
Tobacco—								
Area (acres)	2,739	11,015	12,908	..	..	..	..	26,662
Production (dried leaf '000 lb)	3,061	15,516	18,975	..	..	..	..	37,552
Onions—								
Area (acres)	1,485	3,296	2,998	2,026	302	192	n.a.	10,299
Production (tons)	13,381	21,339	20,060	22,793	4,428	2,176	n.a.	84,177
Potatoes—								
Area (acres)	25,865	39,765	17,712	8,021	6,332	9,367	n.a.	107,062
Production (tons)	142,047	279,553	115,455	78,624	67,164	66,920	n.a.	749,763
Other vegetables—Area (acres)	48,568	52,999	56,881	11,408	7,755	22,623	399	200,633
Fruit—Area (acres)	95,325	70,883	53,048	44,802	24,131	21,157	109	309,455
Vineyards—Area (acres)	25,423	49,838	3,614	64,837	6,650	..	..	150,362
Grapes for table (tons)	8,568	11,057	5,695	1,294	3,135	..	..	29,749
Wine made ('000 gallons)	11,529	7,251	31	43,754	769	..	..	63,334
Currants (tons)	651	3,383	..	3,325	1,068	..	..	8,427
Sultanas and raisins (tons)	14,118	67,070	..	3,169	8	..	..	84,365
Livestock numbers, 31 March 1970—								
Sheep ('000)	72,284	33,156	16,446	19,747	33,634	4,560	252	180,079
Cattle ('000)	5,636	4,462	7,515	1,026	1,681	646	1,194	22,162
Pigs ('000)	708	495	480	351	250	111	4	2,398
Livestock slaughtered for human consumption—								
Sheep ('000)	5,850	8,177	2,249	2,270	3,164	608	8	22,324
Lambs ('000)	7,460	7,568	688	1,964	1,370	689	149	19,888
Cattle ('000)	1,289	1,256	1,405	203	382	145	97	4,777
Calves ('000)	256	453	275	46	20	33	..	1,083
Pigs ('000)	1,064	895	757	386	316	160	15	3,593
Wool production ('000 lb)	749,830	437,776	196,352	275,005	336,474	48,195	2,666	2,046,298
Wholemilk production—								
All purposes ('000 gallons)	310,104	897,326	189,708	106,160	57,751	103,213	939 (a)	1,665,297
Principal items of machinery on rural holdings—								
Tractors (number)	88,865	82,318	72,106	37,264	35,870	12,956	646	330,025
Shearing machines (stands)	73,189	43,152	17,438	30,080	26,385	4,839	304	195,387
Milking machines (units)	38,018	112,012	34,185	17,642	9,144	16,941	101	228,043
Gross value of production—								
Agriculture (\$'000)	479,500	319,699	315,530	186,766	155,938	41,824	1,443	1,500,700
Pastoral (\$'000)	467,894	385,025	301,577	148,939	176,387	38,532	23,278	1,541,632
Dairying (\$'000)	154,938	225,141	70,959	40,834	25,927	28,774	666	547,239
Poultry (\$'000)	83,220	48,460	25,042	10,952	13,874	5,566	596	187,710

(a) Includes estimates of production in the Northern Territory.

n.a. : Not available.

Land occupied in different districts, 1969-70

For the season 1969-70 the number of occupiers of rural holdings was 69,498, the area devoted to agriculture 7,119,906 acres, and the total area occupied 39,057,452 acres.

It should be noted that statistics in this part of the *Year Book* have been compiled for statistical districts, which are groups of counties, namely, land areas with immutable boundaries. A map defining the boundary of each statistical district appears opposite.

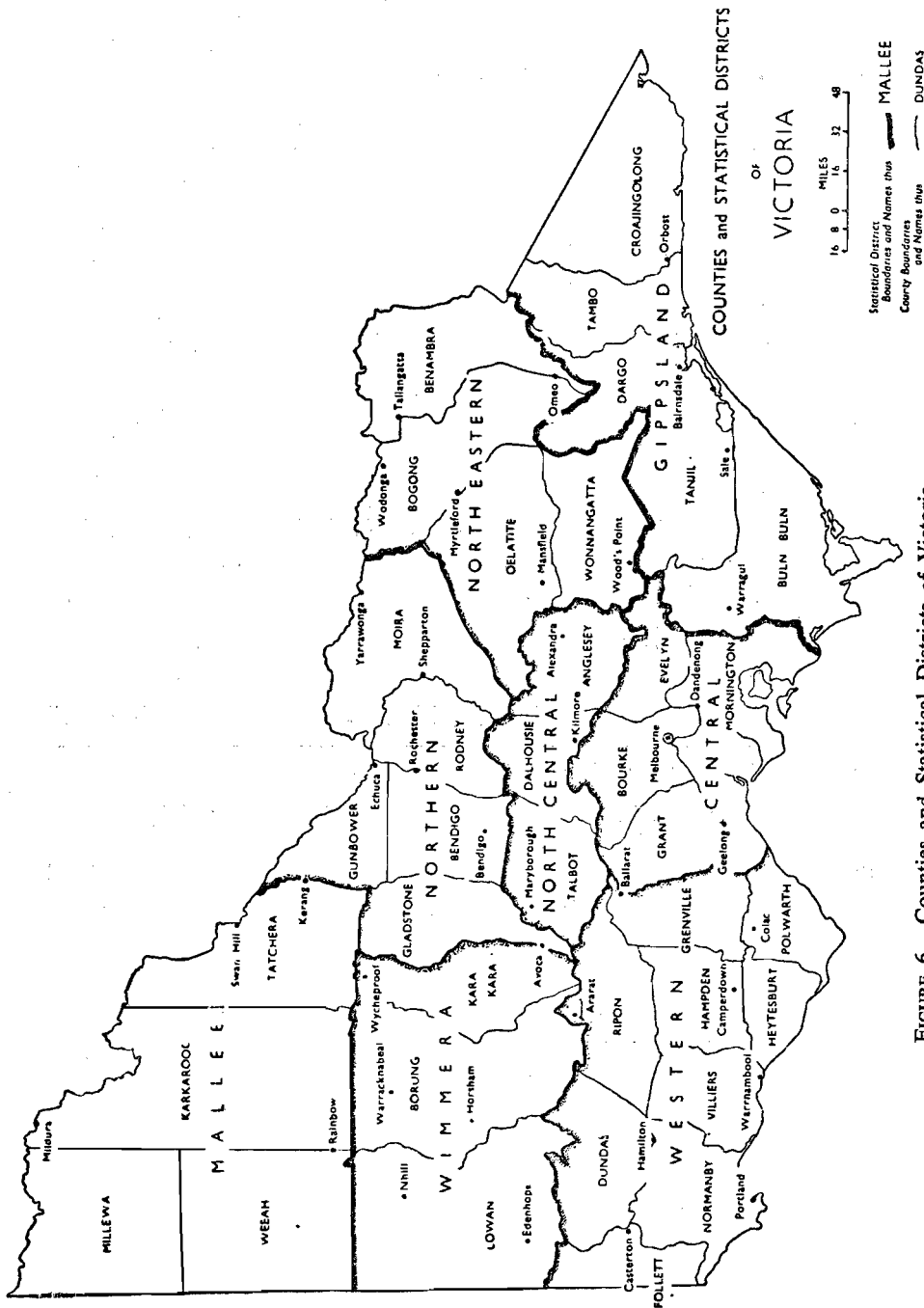


FIGURE 6. Counties and Statistical Districts of Victoria.

VICTORIA—LAND IN OCCUPATION IN EACH DISTRICT, SEASON 1969–70
(Areas of 1 acre and upwards)

Statistical District	Total area of Districts	Number of holdings	Area occupied				
			For agricultural purposes (a)	For pasture		Unproductive	Total
				Sown grasses, clover, or lucerne (b)	Natural grasses		
	'000 acres		'000 acres	'000 acres	'000 acres	'000 acres	'000 acres
Central	4,065	14,767	297	1,769	430	138	2,633
North-Central	2,930	4,373	121	1,280	614	82	2,097
Western	8,775	12,797	488	5,143	886	276	6,793
Wimmera	7,395	5,958	2,014	2,865	954	315	6,148
Mallee	10,784	5,973	2,734	2,269	2,123	553	7,679
Northern	6,337	11,507	1,250	3,009	1,240	130	5,629
North-Eastern	7,220	5,099	133	1,757	1,541	355	3,786
Gippsland	8,739	9,024	83	2,072	1,567	570	4,292
Total	56,246	69,498	7,120	20,163	9,355	2,419	39,057
PERCENTAGE OF ABOVE TO AREA OCCUPIED							
Central	..	..	11.28	67.16	16.32	5.24	100.00
North-Central	..	..	5.77	61.04	29.28	3.91	100.00
Western	..	..	7.19	75.71	13.04	4.06	100.00
Wimmera	..	..	32.76	46.60	15.52	5.12	100.00
Mallee	..	..	35.60	29.55	27.65	7.20	100.00
Northern	..	..	22.21	53.45	22.03	2.31	100.00
North-Eastern	..	..	3.51	46.41	40.70	9.38	100.00
Gippsland	..	..	1.93	48.28	36.51	13.28	100.00
Total	..	..	18.23	51.63	23.95	6.19	100.00
PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE							
Central	7.23	21.25	4.17	8.77	4.60	5.70	6.74
North-Central	5.21	6.29	1.70	6.35	6.56	3.39	5.37
Western	15.60	18.41	6.85	25.51	9.47	11.41	17.39
Wimmera	13.15	8.57	28.29	14.21	10.20	13.02	15.74
Mallee	19.17	8.59	38.40	11.25	22.69	22.86	19.66
Northern	11.26	16.56	17.56	14.92	13.26	5.38	14.41
North-Eastern	12.84	7.35	1.87	8.71	16.47	14.68	9.70
Gippsland	15.54	12.98	1.16	10.28	16.75	23.56	10.99
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

(a) Excludes area of clover and grasses cut for hay and seed.

(b) Includes oats and barley sown for grazing and lucerne fed off.

Classification of rural holdings by size and type of activity

Tabulations classifying rural holdings by principal characteristics have, in the past, been undertaken at irregular intervals. Since the Second World War they have been prepared for each of the years 1947–48, 1949–50, 1955–56, 1959–60, 1965–66, and 1968–69.

VICTORIA—HOLDINGS CLASSIFIED ACCORDING
TO SIZE OF HOLDING : NUMBER AND TOTAL
AREA OF HOLDINGS, 1965–66

Size of holding (acres)	Number of holdings	Total area of holdings
		acres
1– 99	21,340	805,121
100– 199	12,219	1,742,700
200– 299	6,693	1,623,245
300– 399	5,312	1,803,816
400– 499	3,297	1,470,439
500– 999	11,037	7,797,393
1,000–1,399	3,738	4,404,898
1,400–1,999	2,573	4,255,922
2,000–2,999	1,599	3,817,242
3,000–4,999	926	3,453,964
5,000 and over	465	6,668,863
Total	69,199	37,843,603

The following tables show some of the information, in summary form, from the 1965-66 and 1968-69 classification of rural holdings by size and type of activity :

VICTORIA—HOLDINGS CLASSIFIED ACCORDING TO TYPE OF ACTIVITY :
NUMBER AND TOTAL AREA OF HOLDINGS AND AREA USED
FOR VARIOUS PURPOSES, 1965-66

Type of activity	Number of holdings	Total area of holdings	Area used for—				
			Fruit	Crops (excluding fruit)	Fallow	Sown grasses and clovers	Balance of holding
		acres	acres	acres	acres	acres	acres
Sheep—Cereal grain	6,160	8,285,531	26	2,215,984	1,074,082	2,411,438	2,584,001
Sheep	13,093	13,039,405	536	483,573	122,617	6,871,486	5,561,193
Cereal grain	3,453	4,712,777	262	1,903,412	1,187,381	580,179	1,041,543
Beef cattle	3,111	3,497,707	193	38,122	16,082	929,783	2,513,527
Dairying	20,087	4,474,207	1,500	239,007	57,339	2,781,603	1,394,758
Vineyards	2,165	85,878	48,803	3,694	1,526	7,546	24,309
Fruit (other than vine)	2,131	144,005	64,244	3,891	2,845	27,125	45,900
Vegetables—							
Potatoes	923	140,138	228	37,444	5,225	56,408	40,833
Other and mixed	1,528	265,154	2,549	76,149	8,236	113,765	64,455
Poultry	1,008	53,321	683	5,798	2,915	18,674	25,251
Pigs	273	33,337	33	2,718	2,925	8,959	18,702
Tobacco	284	65,887	60	10,285	1,182	16,469	37,891
Other	353	27,370	504	5,006	2,075	6,158	13,627
Multi-purpose	2,193	1,525,082	2,368	227,300	68,613	668,373	558,428
Total classified holdings	56,762	36,349,799	121,989	5,252,383	2,553,043	14,497,966	13,924,418
Unclassified holdings—							
Sub-commercial	7,848	750,292	1,964	19,802	25,885	215,197	487,444
Unused, special, etc.	4,589	743,512	797	1,294	41,398	90,710	609,313
Total all holdings	69,199	37,843,603	124,750	5,273,479	2,620,326	14,803,873	15,021,175

VICTORIA—NUMBER OF HOLDINGS GROWING WHEAT, AND NUMBER OF HOLDINGS ON WHICH LIVESTOCK WERE DEPASTURED, CLASSIFIED ACCORDING TO SIZE OF HOLDING, 1968-69(a)

Size of holding (acres)	Number of holdings with—				
	Wheat	Sheep	Cattle for		Pigs
			Milk production	Beef production	
1- 99	196	2,858	6,373	6,728	1,758
100- 199	323	2,900	7,793	5,331	1,413
200- 299	403	2,611	3,955	3,718	834
300- 399	778	3,009	2,438	3,138	632
400- 499	683	2,315	1,321	2,122	358
500- 999	4,282	9,084	3,041	6,718	1,212
1,000-1,399	2,043	3,459	901	2,474	449
1,400-1,999	1,575	2,471	563	1,716	336
2,000-2,999	1,074	1,556	573	1,083	386
3,000-4,999	652	926		637	
5,000 and over	287	471		375	
Total	12,296	31,660	27,061	34,040	7,447

(a) Subject to revision.

NOTE. Individual holdings may appear in more than one category.

Superphosphate and fertiliser development

Approximately 90 per cent of the annual tonnage of fertilisers used in Victoria is superphosphate, all of which is manufactured locally.

James Cuming, who arrived in Victoria in 1862, established the superphosphate industry in Australia. The phosphatic material used in the manufacture of the early superphosphate consisted of bone char, ground bones, and guano, but subsequently rock phosphate was imported from Florida and Tennessee, U.S.A. However, since the First World War high grade deposits of rock phosphate from Nauru and Ocean and Christmas Islands have provided almost all of the rock phosphate used for superphosphate manufacture in Australia.

Since the 1920s there has been a growing consciousness of the need to topdress pastures with superphosphate for maximum productivity. In 1969-70, 874,936 tons of superphosphate were used in Victoria, of which 633,268 tons were used on pastures.

Fertiliser developments

Next to phosphorus, nitrogen is the most important nutrient in Victorian agriculture. For many years animal manures supplemented by nitrate of soda and sulphate of ammonia were the only nitrogenous fertilisers available. Production of animal manures is now insignificant, but urea, ammonium nitrate, calcium ammonium nitrate, urea-formaldehyde, and anhydrous ammonia are additions to the list of manufactured fertilisers.

Legislation

Since the Artificial Manures Act was introduced in 1897, the law has required fertilisers to be sold according to a guaranteed analysis. Under the *Fertilisers Act* 1958 manufacturers must register the brands, analyses, and prices of their product with the Department of Agriculture. A list of registrations is published annually in the *Government Gazette*.

In 1969-70 artificial fertilisers were used on 3,148,969 acres of wheat; 1,474,194 acres of other cereal crops; 81,163 acres of vegetables; 77,126 acres of orchards; 162,984 acres of other crops; and 10,408,338 acres of pastures. Superphosphate is the main fertiliser used on both crops and pastures and in 1969-70 amounted to 241,693 tons of single strength equivalent or 82.0 per cent of the total artificial fertiliser used on all crops and 633,243 tons or 89.0 per cent of that used on pastures.

VICTORIA—ARTIFICIAL FERTILISERS

Year	Crops			Pastures		
	No. of holdings	Area fertilised	Quantity used	No. of holdings	Area fertilised	Quantity used
		'000 acres	'000 tons		'000 acres	'000 tons
1965-66	30,582	4,664	255	40,637	11,730	800
1966-67	29,771	4,772	267	40,658	12,502	846
1967-68 (a)	30,253	4,961	289	39,636	11,359	780
1968-69 (a)	n.a.	5,654	316	34,994	9,233	638
1969-70 (a)	27,055	4,945	294	35,426	10,408	713

(a) Not strictly comparable with previous years due to changing coverage as mentioned on page 305.

Artificial fertilisers, 1970; Superphosphate, 1971

Aerial agriculture

The aerial agriculture industry in Victoria has grown rapidly and aircraft are now extensively used for topdressing and sometimes for seeding, crop spraying with weedicides and insecticides, and the control of rabbits by the dropping of poisoned carrot baits. A more recent phase of aerial development is the dropping of young fish into Victorian lakes and streams. A full description of aerial agriculture will be found on pages 494 and 764-5 of the *Victorian Year Book* 1966.

Before 1 January 1967 statistics on aerial agriculture were collected by the Department of Civil Aviation who developed the series in 1956. Since 1 January 1967 these statistics have been compiled from quarterly returns collected by the Bureau of Census and Statistics from operators of aircraft engaged in aerial topdressing, seeding, spraying, and allied activity such as rabbit and dingo baiting.

VICTORIA—AERIAL AGRICULTURE

Particulars	Unit	Year ended 31 March—				
		1966	1967	1968	1969	1970
Total area treated (a)	'000 acres	2,472	2,424	1,803	1,956	2,337
Topdressed or seeded	'000 acres	1,630	1,945	(b)	(b)	1,795
Sprayed or dusted (c)	'000 acres	702	(b)	266	(b)	542
Materials used—						
Superphosphate	tons	110,550	(b)	(b)	87,225	116,125
Seed	'000 lb	56	139	310	157	99
Aircraft utilisation (flying time)	hours	19,832	19,109	15,124	15,536	20,893

(a) Areas treated with more than one type of material on one operation are counted once only. Includes 139,910 acres baited for rabbit destruction in 1966, 45,000 acres in 1969, and 58,000 acres in 1970. Figures for 1967 and 1968 not available for publication.

(b) Not available for publication.

(c) Includes 58,000 acres baited for rabbit destruction, etc., in 1970.

Farm machinery

The numbers of the principal items of farm machinery on rural holdings at 31 March during each of the five years 1966 to 1970 are given in the following table :

VICTORIA—FARM MACHINERY ON RURAL HOLDINGS

Particulars	Number at 31 March—				
	1966	1967	1968 (a)	1969 (a)	1970 (a)
Milking machines—Units	105,004	108,664	109,137	112,618	112,012
Shearing machines—Stands	41,689	43,510	43,596	43,393	43,152
Tractors—Wheeled type	73,668	76,678	78,721	79,101	79,188
Crawler type	2,493	2,888	3,045	2,958	3,130
Rotary hoes	12,016	12,305	13,112	12,915	11,646
Fertiliser distributors and broadcasters	28,219	30,948	30,560	30,383	30,036
Grain drills—Combine	19,604	20,392	20,380	20,217	19,919
Other	9,586	9,574	9,187	9,002	8,641
Maize planters	762	747	750	909	877
Headers, strippers and harvesters	13,963	14,319	14,556	14,179	13,310
Pick-up balers	11,972	12,965	13,173	14,106	14,337
Forage harvesters	1,625	1,913	1,951	2,080	2,108

(a) Not strictly comparable with previous years; see page 305 for explanation.

NOTE. Details of items which have not been collected since 1955 are published in the *Victorian Year Book* 1954-1958, page 88.

Mechanisation of farming, 1962

Progress of cultivation

The first Statistical Register of Victoria published in 1854 shows that in 1836 there were 50 acres of land under cultivation in the Colony of Victoria. By 1840 this figure had increased to 3,210 acres. This progress continued until 1852 when 57,471 acres were under cultivation. With the discovery of gold in Victoria, agricultural progress received a temporary setback, the area of land cultivated declining to 34,816 acres in 1854. However, with the influx of population came a demand for agricultural products and, by the end of 1860, the area of land under cultivation amounted to 407,740 acres.

The following table shows the annual average area under cultivation in each decennium from 1856 to 1965 and the actual area for each of the five seasons 1966 to 1970 :

VICTORIA—ACREAGE CULTIVATED ANNUALLY

Period or year (ended March)	Annual average area in each decennium, 1856 to 1965, and actual area each year 1965 to 1970, under—		
	Crop (a)	Fallow	Total cultivation (a)
	acres	acres	acres
1856 to 1865	325,676	12,146	337,822
1866 to 1875	624,377	57,274	681,651
1876 to 1885	1,306,920	137,536	1,444,456
1886 to 1895	2,109,326	364,282	2,473,608
1896 to 1905	3,022,914	524,197	3,547,111
1906 to 1915	3,756,211	1,276,148	5,032,359
1916 to 1925	4,594,244	1,852,145	6,446,389
1926 to 1935	5,233,894	2,501,357	7,735,251
1936 to 1945	4,435,645	2,142,953	6,578,598
1946 to 1955	4,635,982	2,311,401	6,947,383
1956 to 1965	4,222,393	2,191,000	6,413,393
1965	5,019,479	2,484,423	7,503,902
1966	4,969,436	2,620,326	7,589,762
1967	5,143,495	2,751,499	7,894,994
1968	(b)5,202,729	(b)2,646,502	(b)7,849,231
1969	6,156,483	2,727,232	8,883,715
1970	5,374,775	1,745,131	7,119,906

(a) Until 1960 the area of crop included pasture cut for hay and seed. For the decennium 1956 to 1965 and 1961 onwards, area of pasture cut for hay and seed is excluded in the above table.

(b) Includes 135,574 acres under crop and 55,814 acres under fallow resulting from change in coverage referred to on page 305.

Crops and growers

The following table shows the area under, the yield from, and the gross value of each of the principal crops in Victoria for the season 1969-70 :

VICTORIA—AREA, YIELD, AND GROSS VALUE OF CROPS, 1969-70

Crop	Area	Yield	Gross value (a)
	acres		\$'000
Cereals for grain—			
Barley —			
2-row	460,905	10,787,122 bushels	10,491
6-row	25,719	585,517 bushels	570
Maize	1,145	71,930 bushels	111
Oats	883,651	25,927,064 bushels	10,495
Rye	11,560	57,000 bushels	58
Wheat	3,298,254	83,543,852 bushels	116,747

VICTORIA—AREA, YIELD, AND GROSS VALUE OF CROPS, 1969-70—*continued*

Crop	Area	Yield	Gross value (a)
	acres		\$'000
Hay—			
Barley and rye	10,292	18,479 tons	250
Lucerne	95,135	226,843 tons	5,143
Meadow	853,364	1,739,096 tons	26,943
Oaten	199,638	405,747 tons	5,632
Wheaten	41,528	70,388 tons	959
Green fodder	77,420	..	2,182
Grey and other field peas	21,128	410,109 bushels	631
Grass and clover seed	53,587	112,388 centals	1,610
Industrial crops—			
Broom millet	210	779 cwt fibre	21
Linseed	18,880	685 cwt seed	4
Hops	838	187,039 cwt	1,167
Mustard	657	15,355 cwt	1,445
Tobacco	11,015	4,932 cwt	67
Tobacco		138,536 cwt	15,348
Vegetables—			
Onions	3,296	21,339 tons	1,469
Potatoes	39,765	279,553 tons	17,002
Other	52,999	261,113 tons	24,080
Stock fodder—			
Pumpkins and root crops	7,451	..	559
Vineyards—			
Grapes—			
Table	2,648	11,057 tons	2,245
Wine	7,044	34,943 tons	1,735
Drying	35,955	292,565 tons	..
Vines, unproductive	4,191	63,801 tons of sultanas	18,937
Vines, unproductive		3,269 tons of raisins	1,060
Vines, unproductive		3,383 tons of currants	1,225
Orchards—			
Productive	57,189	..	43,444
Unproductive	13,694	..	..
All other crops	23,165	..	8,069
Total crops	6,312,323	..	319,699

(a) The gross value is based on the wholesale price realised in the principal markets. The places where primary products are absorbed locally or where they become raw materials for a secondary industry are presumed to be principal markets.

VICTORIA—NUMBER OF GROWERS OF CERTAIN CROPS, SEASON 1969-70

Crops grown	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-ern	North-Eastern	Gipps-land	
Grain crops—									
Wheat	547	400	856	3,869	2,660	3,482	414	39	12,267
Oats	559	559	2,164	2,680	1,050	2,384	526	31	9,953
Barley	655	120	523	1,360	1,306	1,099	75	56	5,194
Maize	1	..	1	..	2	3	15	61	83
Green fodder—									
Maize	185	20	69	3	1	9	16	243	546
All other	757	308	1,027	52	77	455	290	587	3,553
Other—									
Potatoes	1,168	333	445	4	20	10	81	358	2,419
Onions	211	..	186	4	23	10	2	3	439
Other vegetables	1,293	22	313	31	326	392	24	183	2,584
Orchards	1,517	124	47	69	1,071	934	119	56	3,937
Vineyards	11	9	3	8	2,281	159	22	..	2,493
Grass and clover seed	27	85	189	41	47	108	174	7	678
Tobacco	..	..	..	..	..	23	352	..	375

The preceding table shows the numbers of growers of certain primary products, in each statistical district of the State, for the season 1969-70.

The information has no relation to the number of rural holdings in the State, as numbers of occupiers are engaged in the cultivation of more than one of the crops enumerated.

A summary of the area under cultivation and yield of crops in each statistical district of the State for the season 1969-70 is given in the following tables :

VICTORIA—AREA UNDER CULTIVATION, SEASON 1969-70
(acres)

Crop	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	Northern	North-Eastern	Gipps-land	
Grain crops—									
Wheat	34,153	32,589	71,336	992,091	1,476,177	636,004	52,528	3,376	3,298,254
Oats	28,848	30,866	213,363	261,702	123,498	197,087	26,909	1,378	883,651
Barley	64,007	3,969	24,712	120,142	189,164	77,635	3,179	3,816	486,624
Rye	347	271	190	216	10,077	234	101	124	11,560
Maize	(a)		(a)		364	103	73	600	21,140
Field peas	7,702	626	5,207	4,300	2,406	721	65	101	1,128
All hay	158,632	68,815	305,111	85,653	51,832	273,429	77,716	178,769	1,199,957
Green fodder	17,241	6,441	29,817	1,693	2,050	9,632	4,904	13,093	84,871
Grass and clover for seed	1,127	7,305	14,277	2,700	5,394	7,746	14,683	355	53,587
Tobacco						451	10,564		11,015
Potatoes	21,248	5,615	6,082	10	122	229	648	5,811	39,765
Onions	1,123		1,888	3	57	197	2	26	3,296
All other vegetables	24,285	91	14,380	80	3,286	4,123	213	6,541	52,999
Vines	79	201	141	810	46,296	902	1,409		49,838
Orchards	21,158	1,995	452	2,111	8,563	34,334	1,789	481	70,883
All other crops	4,831	275	26,038	860	1,589	6,561	1,596	2,005	43,753
Total area under crop	384,781	159,059	712,994	1,472,371	1,920,875	1,249,388	196,379	216,476	(b)6,312,323
Land in fallow	34,690	13,378	43,659	585,931	839,237	192,354	11,501	24,382	1,745,132
Total area under cultivation	419,471	172,437	756,653	2,058,302	2,760,112	1,441,742	207,880	240,858	8,057,455

(a) Included in all other crops.

(b) The total area under crop includes 853,364 acres of grass and clover cut for hay and 30,597 acres of double-cropping.

VICTORIA—YIELD OF PRINCIPAL CROPS, SEASON 1969-70

Crop	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	Northern	North-Eastern	Gipps-land	
Grain crops—									
Wheat bush	884,868	834,893	2,413,437	20,220,335	33,038,274	15,786,038	1,296,649	69,358	83,543,852
Oats "	836,944	1,008,216	9,100,931	7,039,761	2,360,749	4,930,992	627,899	21,572	25,927,064
Barley "	1,920,799	120,842	757,154	2,749,674	3,822,282	1,849,881	70,335	81,672	11,372,639
Maize "	(a)		(a)		22,600	8,080	3,760	37,450	71,930
Field peas "	174,957	18,108	118,995	65,544	20,007	9,498	912	2,088	410,109
All hay tons	339,431	131,771	623,882	139,837	76,778	535,871	164,645	448,738	2,460,953
Grass and clover for seed centals	1,152	17,753	26,456	4,111	6,056	13,819	42,676	365	112,388
Tobacco cwt						4,642	133,894		138,536
Potatoes tons	144,380	42,482	43,458	88	557	1,763	3,877	42,948	279,553
Onions "	6,898		12,311	9	446	1,432	4	239	21,339
Wine made gallons	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	7,251,000
Dried vine fruit—									
Raisins ton	..	..	..	..	3,269	..	..	..	3,269
Sultanas "	..	..	..	..	63,801	..	..	..	63,801
Currants "	..	..	..	..	3,383	..	..	..	3,383

(a) Details for individual districts are not available for publication.

Principal crops

The cereals wheat, oats, and barley are the principal crops grown in Victoria and these, together with hay, represent about 90 per cent of the total area sown, although there is some variation from year to year. The growing of potatoes, grapes, and apples is also important.

In the following section some detailed descriptive and statistical information is given of all main crops grown in the State including those mentioned above.

Wheat

The acreage sown to wheat in recent years has been more than 3 million acres. This is about half the total area under crop in the State. Virtually all the wheat crop is used for grain production, only about 1 per cent being cut for hay. The average annual production for the five years ended 1969–70 was about 67 million bushels of which about 65 per cent was exported. Grain yields during these five years, which included a severe drought in 1967–68, averaged about 20 bushels (60 lb per bushel) per acre, but yields as high as 60 bushels per acre are harvested on individual farms in most seasons. The highest officially recorded yield is 78.8 bushels per acre for 50 acres grown near Murtoa in 1960. However, in the 1967–68 drought, wheat production fell to 29 million bushels and the average yield to 8.8 bushels per acre.

Record production occurred in the year following the drought when a crop of just under 4 million acres produced about 91 million bushels. Similar increases in several other States led to a considerable surplus over the requirements for export. The Wheat Marketing Act proclaimed on 9 December 1969 implemented in Victoria the Wheat Delivery Quota Scheme proposed by the Australian Wheat Growers' Federation and provided the administrative machinery decided upon by the Victorian Farmers' Union for the operation of the scheme. The scheme aims to allocate deliveries in accordance with market demand, availability, and storage capacity. In the 1969–70 season the quota for wheat grown in Victoria and in the adjacent regions which normally deliver to silos operated in the Victorian grain handling system was 65 million bushels or about 5 per cent below the average of receipts during the previous five seasons. Some of the production in excess of the quota was, however, received by the Grain Elevators Board where space was available as advance deliveries against the 1970–71 quota of 52 million bushels—a reduction of 20 per cent compared with the previous season. As a result of the lower requirements the area sown to wheat fell to less than 2 million acres in 1970–71.

The main wheat belt lies in the northern part of the State, in the Mallee, Wimmera, and Northern Districts, where about 94 per cent of the crop is grown. The average annual rainfall varies from about 12 inches in the north-west of the State to about 20–30 inches at the eastern and southern margins. About three quarters of the wheat crop is sown on bare fallowed land.

Superphosphate is applied at seeding to virtually all crops. Zinc sulphate is added in the Wimmera District, applications normally being made to each third or fourth wheat crop. Nitrogenous fertilisers are used in particular circumstances, namely, on light sandy soils and land infested with skeleton weed in the Mallee and on heavily cropped land in the

Wimmera and southern areas. Diseases are not normally a major problem, but heavy losses occur due to foot rot and cereal cyst nematode in some seasons. Stem rust rarely causes much loss. Ball smut is effectively controlled by pickling with fungicide powder which is done at the same time as the seed is graded. Weeds are controlled by fallow cultivation or by crop spraying. The crop is harvested from mid-November in the early districts to January under late conditions.

Wheat is grown in rotation with fallow, other cereal crops, and pastures. The use of subterranean clover and medic leys has greatly improved soil fertility, with resultant benefit to wheat yields and quality. Sheep grazed on these, and on native pastures, contribute materially to the State's wool and prime lamb production, especially to the production of early prime lambs.

Wheat is grown on three major soil types :

1. Mallee soils referred to as solonised brown soils ;
2. self-mulching grey soils of heavy texture and high fertility in the southern Wimmera ; and
3. red-brown earths of varying texture in the northern Wimmera and the Northern District.

Most wheat varieties grown in Victoria are of the soft white class. The environment generally does not favour the production of wheat of the harder types, but limited areas of the hard variety Emblem are sown in the eastern Mallee where wheat with protein content above the Victorian f.a.q. (fair average quality) is usually produced. Substantial improvement in wheat quality has been achieved by plant breeding during the past 30 years, and one of the leading soft wheats at present is in the medium to strong class. The adoption of clover and medic ley rotation systems has led to a substantial improvement in the protein content, and thus the bread making quality, of Victorian wheat.

Virtually the whole of the wheat crop is handled, stored, and transported in bulk. The crop is marketed through the Australian Wheat Board. The greater part of the crop is marketed as one grade known as f.a.q. (fair average quality). Small amounts of the semi-hard wheat grown in the eastern Mallee and low protein soft wheat suitable for biscuit flours are segregated for separate sale.

Grain Elevators Board

In 1934 an Act was passed to provide for the handling of wheat in bulk in Victoria. The Act gave the Government power to constitute a Board of three members to implement the provisions of the Act. As a result of submissions made by the Board to, and approved by, the Government, 226 country receiving elevators and a 30 million bushel capacity shipping terminal at Geelong and storage facilities for 4 million bushels at Portland have been constructed, the necessary finance being obtained from loans totalling \$30,818,000. Repayment of the principal and interest are guaranteed by the Victorian Government. In 1963 the Act was amended to provide for the handling of barley in bulk by the Grain Elevators Board.

The Grain Elevators Board first received and shipped Victorian wheat in bulk for the 1939-40 season and first received barley in bulk for the 1963-64 season.

The Board's Geelong Terminal is operated by push-button remote control with operational indicator lights appearing on a diagram panel of the whole

terminal. Grain can be received from rail trucks and can be shipped from the terminal at the same rate of 1,600 tons per hour, either direct from the terminal storage bins or by a combination of storage bins and rail receivals. The storage facilities at Portland are linked to the Portland Harbor Trust shipping terminal.

The Grain Elevators Board has under its control storage for 140 million bushels of wheat and barley. In comparison with the season 1969-70, when the quantity of 85,810,000 bushels of bulk wheat and 7,270,000 bushels of bulk barley were delivered to the Board, the receivals for the 1970-71 season were 32.7 million bushels of bulk wheat and 9.8 million bushels of bulk barley. Wheat quotas were introduced for the 1969-70 season, Victoria's quota being fixed at 65 million bushels and the balance of the receivals being over-quota wheat. The Victorian quota for 1970-71 was 52 million bushels.

The following statement shows the revenue and expenditure of the Grain Elevators Board in Victoria:

VICTORIA—GRAIN ELEVATORS BOARD: REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	Year ended 31 October—				
	1966	1967	1968	1969	1970
REVENUE					
Grain handling charges	3,936	4,375	3,979	4,654	5,022
Interest on investments	373	437	482	552	584
Other	..	..	3	..	..
Total revenue	4,309	4,812	4,464	5,206	5,606
EXPENDITURE					
Operating and maintenance expenses	1,317	1,517	1,093	1,651	1,949
Administration expenses	414	457	342	458	505
Depreciation and renewals	504	544	571	573	600
Interest on loans	1,230	1,348	1,420	1,516	1,590
Sinking fund charges	231	255	269	288	292
Appropriations to reserves	493	788	762	720	669
Other	45	2	6	..	..
Total expenditure	4,234	4,911	4,463	5,206	5,605
Net surplus	75	—99	1	..	1
Fixed assets at 31 October	26,611	28,909	30,700	31,823	32,825
Loan indebtedness at 31 October—					
State Government	1,729	1,706	1,683	1,672	1,630
Public	22,202	23,723	24,899	26,572	26,734

Australian Wheat Board

History

After the outbreak of the Second World War, the Australian Wheat Board was established in September 1939 under national security legislation. When the war ended in 1945 the Board continued to operate until 1948 as an agent for the Commonwealth Government under "transitional legislation".

In 1948 agreement was reached between the Commonwealth and States for the first of the Wheat Industry Stabilisation Schemes. For constitutional

reasons, it was necessary for each State to pass legislation accepting the Australian Wheat Board as the central marketing authority, and to permit it to operate within the States. Before the outbreak of the war progress had been made in Federal-State Conferences towards a comprehensive stabilisation scheme. The war intervened and full control over the sale of Australian wheat was given to the Board under the exigencies of war-time conditions.

The marketing experience of the Board, and the desires of the growers were finally combined in the wheat stabilisation legislation of 1948 and renewed under successive five year schemes ever since. The Australian Wheat Board now functions under the present *Wheat Stabilisation Act* 1968. This Act authorises the Board to market all wheat harvested between 1 October 1968 and 30 September 1975 (seven seasons) but limits the application of the revised guaranteed price provisions to wheat harvested between 1 October 1968 and 30 September 1973 (five seasons). Negotiations between the growers and the Government will be held before September 1973 to review the guarantee provisions.

Constitution

The Board comprises fourteen members, two growers from each of the five mainland States together with the chairman, a finance member, a millers' representative, and an employees' representative.

Functions and operations

Under complementary Commonwealth and State legislation :

1. the Board is the sole authority for the marketing of wheat in Australia and for both wheat and flour for export ;
2. growers are required to deliver to the Board all wheat grown by them except that required as seed or feed on the farms where it is grown ; and
3. the Board becomes the owner of all wheat delivered to it.

The Board employs the various bulk handling authorities and wheat merchant-shippers are employed by the Board for the receipt of bagged wheat.

Total deliveries by wheat growers to the Victorian branch of the Australian Wheat Board during the 1969-70 season were 85,883,199 bushels including 5,150,000 bushels of southern New South Wales wheat delivered to storages at railway sidings operated by Victorian Railways in New South Wales and 1,812,000 bushels of southern New South Wales wheat delivered to storages in Victoria.

The Mallee experienced its best ever autumn conditions and all other areas received excellent autumn rains. Sowing in the Mallee was completed in June 1969 but dry conditions delayed the Wimmera until July. By September crop conditions were above average in all districts; however, a dry spell from mid-September to late October caused crops to suffer a check although estimates were still high. Whilst the dry conditions reduced yields, the lack of rain in this period possibly saved Mallee crops from greater losses as the development of rust was retarded sufficiently to allow the grains to finish to normal size. Mild temperatures towards harvesting time enabled these crops to yield better than anticipated.

The State yield per acre from the 1969-70 crop was 25.6 bushels. The f.a.q. standard was set at 65.5 lb per bushel.

Wheat standard

The fair average quality (f.a.q.) standard is determined each season by a State committee and is the basis for sales of each crop.

Samples of wheat from various districts are obtained each year and mixed to obtain a representative sample of the whole crop. The f.a.q. weight is then determined by use of the Schopper 1 litre scale chondrometer.

*Area of wheat for grain, production, gross value, f.a.q.,
and holdings growing 20 acres and over*

In the following table the area of wheat for grain, production, average yield, gross value of production of wheat, the f.a.q. standard determined in Victoria and the number of holdings growing wheat (20 acres or more) for each of the seasons 1965-66 to 1970-71 are shown :

VICTORIA—WHEAT FOR GRAIN

Season	Area	Production	Holdings growing wheat (20 acres and over)	Average yield per acre	Gross value	Weight of bushel of wheat, f.a.q.
	'000 acres	'000 bush	number	bush	\$'000	lb
1966-67	3,138	70,896	11,202	22.59	104,471	63½
1967-68	3,224	28,317	11,056	8.78	43,856	65
1968-69	3,984	(a) 90,728	11,686	22.77	122,008	65
1969-70	3,298	83,544	11,618	25.32	116,747	65½
1970-71	1,879	36,901	9,669	19.63	(b) 50,989	64½

(a) Record production.

(b) Subject to revision.

Wheat breeding

The objective of wheat breeding in Victoria is to produce new varieties which will give higher yields of better baking quality grain than existing varieties. Included in the yield objective is the reduction of losses due to drought and various diseases which include cereal cyst nematode (eelworm), stem rust, leaf rust, septoria, and eye spot lodging. The breeding work is a function of the Victorian Department of Agriculture, which undertakes plant breeding, field testing, and quality evaluation. In current breeding programmes, selections are being made from crosses between semi-dwarf and dwarf imported varieties of high yielding ability and Victorian varieties.

The wheat breeding activities of the Department are centred on the State Research Farm at Werribee and the Victorian Wheat Research Institute at Horsham where the hybridisation is carried out, the early generations raised, and the initial quality and disease testing done. This work is supplemented by regional selection centres in other wheat growing districts.

Field testing is undertaken in all districts at Departmental research stations and colleges and on farmers' properties. There are about thirty-five centres for varietal testing in Victoria. Disease testing is carried out at research stations in appropriate areas and at the Victorian Wheat Research Institute at Horsham and the Victorian Plant Research Institute at Burnley. After the early generation quality testing, which is done at the State

Research Farm, Werribee, and the Victorian Wheat Research Institute at Horsham, final evaluations, including test baking, are undertaken at the Department's cereal laboratories in Melbourne.

The wheat breeding work of the Department has been very successful. During the past fifty years over forty new varieties of wheat have been released for cultivation by farmers. The most widely grown of these have been Free Gallipoli (1923), Ghurka (1924), Rancee 4H (1930), Magnet (1939), Quadrant (1941), Insignia and Pinnacle (1946), Sherpa (1953), Olympic (1956), Emblem (1963), and Summit (1966). Almost 90 per cent of the wheat acreage in Victoria is sown to varieties bred by the Department, and for some years Insignia was the most widely grown variety in Australia.

Since 1930, the baking quality of Victorian wheat has improved markedly. This has been due partly to varietal improvement and partly due to improved soil fertility by the use of legume leys with a resultant continuing effect on grain protein content.

The following table shows the areas under the principal varieties of wheat, including wheat for hay, for the seasons 1967-68, 1968-69, and 1969-70. Varieties are tabulated in order of popularity for the last mentioned season.

VICTORIA—PRINCIPAL VARIETIES OF WHEAT SOWN

Variety (in order of popularity, season 1969-70)	Season 1967-68		Season 1968-69		Season 1969-70	
	Acres sown	Percentage of total area sown	Acres sown	Percentage of total area sown	Acres sown	Percentage of total area sown
Insignia	1,562,248	46.84	1,940,328	48.20	1,508,592	45.17
Olympic	823,033	24.68	813,166	20.20	753,515	22.56
Heron	152,488	4.57	253,611	6.30	310,679	9.30
Pinnacle	473,854	14.21	507,223	12.60	299,889	8.98
Summit	63,371	1.90	205,304	5.10	242,383	7.26
Emblem	110,491	3.31	136,870	3.40	86,114	2.58
Insignia 49	55,226	1.66	72,460	1.80	61,554	1.84
Sherpa	30,864	0.93	32,205	0.80	24,570	0.74
Falcon	15,212	0.46	16,102	0.40	11,621	0.35
Beacon	14,969	0.45	12,077	0.30	10,643	0.32
Robin	..	..	..	..	6,027	0.18
Quadrat	9,415	0.28	8,051	0.20	5,527	0.17
Gamenya	..	..	..	..	2,490	0.07
Baldmin	..	..	3,079	0.08	2,377	0.07
Stockade	4,640	0.14	..	..	..	..
All other varieties	19,059	0.57	25,100	0.62	13,801	0.41
Total	3,334,870	100.00	4,025,576	100.00	3,339,782	100.00

Alternative crops to wheat

The reduction in market opportunities for wheat and the introduction of the wheat quota delivery scheme resulted in a serious loss of income for Victorian wheat farmers, many of whom were dependent on wheat for more than 60 per cent of their farm receipts.

The reduction in wheat production left the major farm resources—labour, machinery, and land—underemployed and favoured the adoption of other annual crops with similar climatic and cultural requirements. The other important alternative enterprises open to wheatgrowers were the several forms of livestock production, particularly sheep or cattle on land diverted from wheat to pasture. This, however, involves additional capital in comparison with cropping and in much of the wheat belt offers a comparatively low return per acre. In 1970-71 about one third of the

1.4 million acres taken out of wheat production was sown to increased acreages of other crops and the remainder returned to pasture.

The crops which could be grown in the wheat belt included oats, barley, ryecorn, field peas, safflower, linseed, rapeseed, and canary seed. Summer growing crops such as sorghum, millet, maize, soybean, and sunflower, which are grown in some other wheat-producing areas of northern Australia, Europe, and North America, are not suitable owing to the lack of summer rainfall in the Victorian cereal belt.

The major factor in the choice of a satisfactory alternative crop has been the availability of suitable markets. The world market for many grain products is affected by changes in wheat supplies, and the prices of many of the possible alternatives, particularly oats, barley, and ryecorn, has tended to be much lower than previously; nevertheless, the market for barley offered some opportunity to expand the volume of sales, even though this may have resulted in a further fall in price. Barley was the most widely chosen alternative crop and acreage increased by about 50 per cent in 1970-71. A subsequent rise in the price of barley resulted in far better returns from this crop than had been expected.

Oats, for which very low prices had been obtained in 1969-70, were also sown more widely, although much of the increase was designed to safeguard the winter feed requirements of additional sheep and cattle. Field peas and ryecorn also suffered from a lack of satisfactory markets and were not widely adopted.

Two new crops which appeared to show most promise were safflower and rapeseed, both of which are used for the production of edible vegetable oils for shortenings and other culinary uses. Rapeseed contains about 40 per cent to 45 per cent of oil and safflower 35 per cent to 40 per cent. The meals remaining after the oil has been extracted are a valuable source of protein for incorporation in prepared animal feeds. Local markets existed for limited production and there was fair promise of opportunities to export any surplus. In suitable areas, these crops promised to return about 80 per cent as much as wheat.

Rapeseed had already been adopted on a limited scale in the medium rainfall cropping areas of the Western District, partly as a replacement for linseed, but has now replaced that crop as the major oilseed crop in Victoria because of the larger demand for edible vegetable oils. Some 10,000 acres of rapeseed were sown in the main wheat districts in the 1970-71 season in addition to about 36,000 acres in the medium rainfall districts. The varieties used were Target (*Brassica napus*) and Arlo (*Brassica campestris*) introduced from Canada. Rapeseed is a vigorously growing winter crop; however, the seed pods shatter readily when ripe and some changes in harvesting technique from that used for cereals were necessary to avoid heavy losses of seed.

Safflower is a late-maturing crop which makes very slow winter growth in most of Victoria. It requires good reserves of subsoil moisture to allow the seed to fill and mature after the normal spring rains have finished. It is thus best adapted to those districts which have warmer temperatures in winter and well structured clay subsoils. Experiments conducted by the Department of Agriculture in the early post-war years indicated that safflower

could be grown in the Mallee and Wimmera with moderate success although returns were not as good as those from wheat. One of the main problems was weed invasion during the period of very slow winter growth. With the changed wheat situation, an opening was provided for the introduction of this crop into Victoria and large acreages were sown in the Wimmera and southern Mallee under contract to processors. The main variety used was Gilla from the U.S.A., but smaller acreages were also sown to lines selected in Australia by the processors.

Canary seed, for which there is a small relatively lucrative local market and a widely fluctuating overseas demand, was adopted on a small number of Wimmera farms.

Oats

Oats are the second most widely grown crop in Victoria, and in recent years the area of this cereal has averaged about 1.3 million acres. Nearly 72 per cent of this is normally harvested for grain, some of it after winter grazing. Although oaten hay was important in the past, only about 15 per cent of the acreage is now harvested for this purpose, the remainder (13 per cent) of the area being used solely for grazing.

As the land on which oats are grown is normally not fallowed or as well prepared as that intended for wheat, oat production shows greater fluctuations than wheat production. This seasonal variability is particularly marked in the northern parts of the State. While the average annual grain production is about 20 million bushels (40 lb per bushel), it was 31 million bushels in 1966-67, 6.9 million bushels in 1967-68, and 30 million bushels in 1968-69. Production in 1969-70 was 25.9 million bushels.

Over half the oat grain produced in Victoria is held on farms or is used within Victoria for stock feed. Large quantities are retained for feeding during periods of seasonal shortage or in drought conditions. About a quarter of the crop goes to mills, but only a relatively small proportion is used to manufacture foods for human consumption. Milling quality oats usually command a premium of 2 cents to 10 cents per bushel above feed oats. The other uses of the grain by the mills are for the manufacture of stock foods and for the manufacture of unkilned rolled oats, mainly for export. The remaining quarter of the crop is exported as grain. More than 95 per cent of the oats exported are sold as "Victorian No. 1" grade. Prior to the 1971-72 season oat grain was sold in an open market through merchants or through the voluntary oat pool, and prices fluctuated widely according to seasonal conditions and supplies available. An Oat Marketing Board was then established following a poll held in 1970 in which oatgrowers voted in favour of a single marketing authority for oats within Victoria. Facilities for bulk deliveries exist at most main centres.

During the past ten years the area cut for hay has fluctuated around 200,000 acres in normal seasons with an average production of about 335,000 tons. About double the normal acreage was cut for hay during the 1967-68 drought and production increased by about 100,000 tons. In 1969-70 the area cut for hay was 200,000 acres and production was 406,000 tons. The hay may be cut either for farm use or for sale (mainly to chaff mills near Melbourne, Ballarat, and Maryborough).

Most of the area fed-off completely is grazed by sheep in the winter, but in dairying districts oats are sometimes sown for autumn and winter grazing

to supplement pasture growth. About 30 per cent of the oats completely grazed are in the Mallee District.

The main oat grain producing areas are in the Mallee, Wimmera, Northern, and Western Districts. The popularity of varieties has undergone marked changes in recent years. After having held supremacy for more than 40 years, Algerian was superseded as the leading variety by Orient in 1962, while Avon now holds this position. The area sown to the five leading varieties—Avon, Irwin, Orient, Algerian, and Kent—is about 87 per cent of the total oats acreage in the State.

The area harvested (season 1969–70) for hay was 199,638 acres, and for grain 883,651 acres, which produced 405,747 tons of hay, and 25,927,064 bushels of grain, respectively. The area of oats sown for grazing purposes amounted to 138,544 acres. The following table shows the area, yield, and gross value of oats for grain for each of the five seasons 1965–66 to 1969–70 :

VICTORIA—OATS FOR GRAIN

Season	Area	Production	Average yield per acre	Gross value
	'000 acres	'000 bush	bush	\$'000
1965–66	966	17,784	18.42	15,287
1966–67	1,079	(a) 31,248	28.96	19,033
1967–68	723	6,859	9.49	6,723
1968–69	991	30,230	30.49	13,029
1969–70	884	25,927	29.34	10,495

(a) Record production.

Barley

In 1969–70 both the area sown for barley (487,000 acres) and production (11.4 million bushels) were a record. The previous highest barley production was in 1968–69 when about 409,000 acres (2- and 6-row) were sown with a production of approximately 8.9 million bushels (50 lb per bushel). About 95 per cent of the barley grown in Victoria is of the 2-row type. The remainder is sown with 6-row varieties.

Although some barley is grown in all districts, the production has been traditionally centred in two distinct areas where high quality grain is produced. The largest production is in the south-western Mallee and the adjacent area of the north-western Wimmera. While wheat is the main cereal throughout the cereal growing districts, the barley crop occupies second position in the areas noted above, whereas, in most other portions of northern Victoria, oats occupy this position.

In this northern barley growing area, the best quality barley is grown on the sandier soil types. The crop is sown either on ley land cultivated in the autumn just prior to sowing or on wheaten stubble land. The variety Prior was almost exclusively sown in this area until recently. Now a smaller area in the northern Mallee is also sown to Noyep. A new variety, Weeah, produced by the Department of Agriculture, was introduced in 1968 and was widely grown by 1970. Superphosphate is the standard fertiliser applied. Average district yields are about 19 bushels per acre.

The other important area is in southern Victoria between Melbourne, Geelong, and Bacchus Marsh. Here, barley is the main crop, and the normal

practice is to sow it with superphosphate on fallowed land. The main variety has been Research, but Resibee, released by the Department of Agriculture in 1962, is now being grown to an increasing extent. While Research produced very good malting quality grain in this area, the newer variety has slightly superior quality characteristics. Yields are considerably higher than those obtained in the north, the average yield being about 32 bushels per acre. This region is close to the main barley shipping terminals, and growers' freight costs are much lower than in the northern areas.

The Victorian Grain Elevators Board has provided a bulk handling scheme for barley since 1963. The provision of extra facilities, including special aerated storages at Hopetoun, Rainbow, and Jeparit, and terminal storages at Geelong and Sunshine, with the use of existing elevators on a throughput basis before the wheat harvest, has made it possible for the crop to be handled in bulk in almost all the districts where it is grown. The increased production in 1969-70 exceeded the storage space available and growers' deliveries were regulated pending disposal of part of the crop.

The Victorian malting industry takes most of the malting quality grain for malt for local use and also uses some of the lower grade grain for producing malt for export—principally to eastern Asia, the Pacific Islands, and Africa. Lower quality barley is used for stock feeding as whole grain and manufacturing in the distilling, pearling, and prepared stock feed industries. Barley surplus to these requirements is exported.

The following table shows the area, yield, and gross value of barley for each of the five seasons 1965-66 to 1970-71 :

VICTORIA—BARLEY PRODUCTION

Season	Area		Production		Average yield per acre			Gross value
	2-row	6-row	2-row	6-row	2-row	6-row	Total	
	'000 acres	'000 acres	'000 bush	'000 bush	bush	bush	bush	\$'000
1966-67	213	14	5,066	355	23.74	24.85	23.81	7,260
1967-68	287	18	2,550	158	8.89	8.81	8.88	3,261
1968-69	387	22	8,394	491	21.68	22.45	21.72	8,868
1969-70	461	26	10,787	586	23.40	22.76	23.37	11,060
1970-71	640	25	13,509	529	21.11	21.16	21.13	(a) 16,530

(a) Subject to revision.

Australian Barley Board

History

The Australian Barley Board was constituted in November 1939 under Commonwealth legislation after representatives of growers, merchants, maltsters, and brewers had pointed out to the then Minister of Commerce that a large crop of barley was nearly ready to be harvested, that under wartime conditions grave difficulties would arise, and that some form of control was necessary to prevent a position developing which would jeopardise the interests of barley growers.

In 1948, when National Security Regulations were lifted, the Board passed to State control and the South Australian and Victorian Governments re-constituted the Board under State legislation. This legislation was to stay in force for 5 years, but has been amended several times since, and the current period expired in Victoria in 1971.

The Board consists of a chairman and six members. The chairman is appointed by the Governor of South Australia, three grower members are elected by the growers in South Australia, one grower member is elected by the growers in Victoria, one member is appointed by the Minister for Agriculture in Victoria, and one member is appointed by the industry to represent the consumers. Each of these members is elected and appointed for a period of three years.

The head office of the Board is in Adelaide and there is an office in Melbourne. Depots for the storage and handling of barley are situated at Brooklyn, Geelong, Sunshine, and Portland in Victoria and a number of storage elevators are situated throughout the barley producing areas in the country.

Functions and operations

Under the Victorian Barley Marketing Act all barley grown in Victoria must be marketed by the Board with the exception of :

1. barley retained by the grower for use on the farm where it is grown ;
2. barley which has been purchased from the Board ;
3. barley sold or delivered to any person with the approval of the Board ;
4. barley sold at any auction market in accordance with a permit granted by the Board ; and
5. barley the subject of trade, commerce, or intercourse between States or required by the owner thereof for the purpose of trade or intercourse between States.

It is the function of the Board to receive barley from growers in South Australia and Victoria, market the barley to the best advantage, and distribute the proceeds (less operating costs) to growers. In disposing of this barley the Board, under the Act by which it is constituted, must have regard to the reasonable requirements of persons requiring barley for use or consumption in Victoria and South Australia. The Board has power under the Act to license any person to receive barley on behalf of the Board and the licence to receive barley contains terms and conditions fixed by the Board. The Grain Elevators Board of Victoria is licensed to receive barley in bulk in Victoria. There is one other licensed receiver appointed by the Board to receive barley in bags on behalf of the Board.

The varieties commonly grown in Victoria are Chevalier-Pryor type, Research, and Cape, the first two varieties being two-row barley and Cape being a six-row barley. These varieties are classified by a committee into grades for the purpose of marketing. These grades are largely a natural development arising out of the market demands (there are price differentials between each grade), the highest grade being malting grade, which is at present all required by the malting industry in Victoria for the manufacture into barley malt. Only a very small amount of six-row barley is required for malting.

The Board is not subsidised in any way by government guarantee, and the payment for barley to the growers is made by a series of advances, the first advance paid on delivery. Finance for such is arranged with the Reserve Bank of Australia.

Chevalier-Pryor type barley, being suitable for a medium rainfall area, is commonly grown in the Mallee and Wimmera districts of Victoria.

However, this variety is gradually being replaced by Noyep and Weeah varieties. Research barley is more commonly grown in, and suitable for, a higher rainfall area, and is successfully produced in the higher rainfall southern areas of Victoria. This variety is gradually being replaced by Resibee variety.

Victorian deliveries of barley to the Australian Barley Board increased considerably in the post-war years with an average crop of 4.5 million bushels up to and including the season 1960-61. In the season 1953-54, 7.75 million bushels were delivered, the highest received in the post-war period. From the 1960-61 season to 1968-69 Victorian deliveries to the Board declined, and an average of 2.6 million bushels were received. In the 1969-70 season deliveries rose to 7.4 million bushels and it is expected that in the future the deliveries will increase further.

Prior to 1963-64 all barley received by the Board was delivered in new standard corn sacks. However, after recommendations made to the Government of Victoria by the State Development Committee, the Grain Elevators Board Act was amended to enable barley to be received in bulk on behalf of the Australian Barley Board by the Grain Elevators Board.

Maize

Maize is grown in Victoria both for grain and for green fodder and cultivated mainly in Gippsland. Lower values in the late 1960s and other more profitable alternatives in vegetables and livestock led to a substantial decline in the production of maize grain. The area, yield, and gross value of maize for each of the five seasons 1965-66 to 1969-70 are given in the following table :

VICTORIA—MAIZE PRODUCTION

Season	For green fodder	For grain							Av. yield per acre	Gross value
		Area			Production					
		Hybrid	Other	Total	Hybrid	Other	Total			
	acres	acres	acres	acres	bush	bush	bush	bush	\$'000	
1965-66	4,161	1,497	186	1,683	93,938	7,551	101,489	60.30	121	
1966-67	3,421	1,261	146	1,407	67,044	5,074	72,118	51.26	115	
1967-68	4,723	825	92	917	29,252	2,723	31,975	34.87	48	
1968-69	3,588	1,059	102	1,161	68,553	3,608	72,161	62.15	108	
1969-70	2,435	1,079	66	1,145	69,310	2,620	71,930	62.82	111	

Rye

Cereal rye is of minor importance in Victoria and is not usually grown as a cash crop. European migrants to Australia have created a small demand for this cereal for human consumption, thus helping to stabilise the market for rye grain.

The chief purpose for which rye is grown is the prevention of erosion by wind on sandhills in the Mallee District. There is some interest in it for winter grazing in cold districts during the winter months.

The following table shows the area, yield, and gross value of rye for each of the five seasons 1965-66 to 1969-70 :

VICTORIA—RYE PRODUCTION

Season	Area	Production	Average yield per acre	Gross value
	acres	bushels	bushels	\$'000
1965-66	13,409	65,821	4.91	87
1966-67	11,608	77,722	6.70	106
1967-68	9,578	42,351	4.42	57
1968-69	11,689	70,239	6.01	73
1969-70	11,560	57,000	4.93	58

Hay

The pattern of hay production in Victoria changed considerably in the post-war period. More complete mechanisation and the virtual disappearance of the working horse removed the previous emphasis from cereal hay. The harvesting of large areas of cereal crops, particularly oats, grown specifically for the production of hay for the maintenance of horse teams, is no longer necessary and so there has been a marked decline in the amount of cereal hay produced.

On the other hand, there were spectacular increases in the production of other forms of fodder. The annual production of meadow hay increased from about 400,000 tons to over 2 million tons during this period. There was also a substantial increase in the amount of lucerne hay conserved. Ensilage made mainly from pasture growth increased from about 25,000 tons annually to over 300,000 tons in the post-war period, yet it still supplies something under 10 per cent of the dry nutrients in Victoria's fodder reserves.

This increase in fodder conservation has resulted in more efficient utilisation of the extra herbage grown as the result of pasture improvement in all districts. Large numbers of livestock are now being maintained with greater safety following the conservation of portion of the surplus spring growth for feeding out during periods of seasonal shortage or in drought.

As pastures have been improved and livestock production intensified, the provision of supplementary fodder has become an important factor in the Victorian grazing industry. The conservation of meadow hay fits in well with farm management routine and is a convenient method of ensuring continuity of fodder supplies.

Further information on fodder conservation will be found on pages 337-9.

Particulars of areas harvested and production of the several kinds of hay appear in the following table :

VICTORIA—HAY PRODUCTION, 1969-70

Kind	Area	Production	Average yield per acre
	acres	tons	tons
Wheaten	41,528	70,388	1.69
Oaten	199,638	405,747	2.03
Lucerne	95,135	226,843	2.38
Barley and rye	10,292	18,479	1.80
Meadow	853,364	1,739,096	2.04
Total	1,199,957	2,460,553	2.05

The following table shows, in respect of each statistical district of the State, the quantity of ensilage made during the 1969-70 season and the stocks of ensilage and hay held on rural holdings at 31 March 1970 :

VICTORIA—ENSILAGE MADE AND FARM STOCKS
OF ENSILAGE AND HAY
(tons)

Statistical District	Ensilage made, 1969-70	Stocks at 31 March 1970	
		Ensilage	Hay
Central	78,966	58,986	280,665
North-Central	5,258	6,260	114,378
Western	36,887	31,629	622,119
Wimmera	2,626	8,722	182,039
Mallee	4,439	6,839	92,590
Northern	12,155	15,635	501,154
North-Eastern	37,379	38,251	215,474
Gippsland	111,703	85,558	368,555
Total	289,413	251,880	2,376,974

Potatoes

Victoria is the largest producer of potatoes in Australia, contributing a little more than one third of the total annual requirement. Potatoes are generally used as a fresh vegetable, but substantial quantities are processed into chips, crisps, and other prepared forms, as well as dehydrated flakes. Generally regarded as a summer crop, potato planting goes on in one district or another for ten months of the year, while harvest extends over the whole year.

Early crops are grown in favoured localities where the risk of frost is not great, such as in the Bellarine Peninsula and the market garden areas south-east of Melbourne. These are lifted from October (or sooner) to December. Mid-season crops come on the market in January, February, and March from districts such as Koroit, Gembrook, Koo Wee Rup, and parts of Gippsland. The late or main crop is produced in the Central Highlands (Ballarat to Trentham), Kinglake, the Otways, and the Gippsland hill country. Its harvest commences in April and runs on until October.

VICTORIA—POTATO PRODUCTION

Season	Area	Production (a)	Average yield per acre	Gross value
	acres	tons	tons	\$'000
1965-66	34,333	240,786	7.01	11,050
1966-67	37,167	225,186	6.06	15,291
1967-68	40,329	215,941	5.35	18,566
1968-69	39,979	299,961	(b) 7.50	10,343
1969-70	39,765	279,553	7.03	17,002

(a) Includes amounts held on farms for seed, stock feed, etc., as follows : 27,851 tons in 1965-66, 26,394 tons in 1966-67, 28,783 tons in 1967-68, 36,328 tons in 1968-69, and 29,619 tons in 1969-70.

(b) Record average yield.

About two thirds of the total area of potatoes planted in Victoria is grown under spray irrigation. In most cases the water is derived from farm storages or from bores. Potato growing has become increasingly mechanised and production has, therefore, tended to pass into the hands of specialist growers having larger individual areas.

Onions

The principal onion growing areas are in the Central and Western Districts. In the season 1969-70 these areas were responsible for 91 per cent of the total onion production of the State.

VICTORIA—ONION PRODUCTION

Season	Area	Production	Average yield per acre	Gross value
	acres	tons	tons	\$'000
1965-66	2,955	17,115	5.79	1,814
1966-67	3,295	22,375	6.79	1,464
1967-68	3,617	11,339	3.13	1,427
1968-69	3,634	21,282	5.86	905
1969-70	3,296	21,339	6.47	1,469

Linseed

Linseed is the major industrial oil seed crop grown in Victoria. Its commercial production, which began in 1947, increased to over 25,000 acres in suitable years, with an output in excess of 300,000 bushels. In wet seasons, however, weather and soil conditions seriously cut the intended acreage. Since 1964 acreage has been restricted following a reduction in demand due to the introduction of synthetic paints and floor coverings.

Linseed has proved to be well adapted to broad acre production over a wide area of mixed farming and pastoral country in the 20 to 30 inch rainfall zone in the western part of Victoria. Initially, the industry was developed on imported varieties, and, in the period up to 1955, yields were low because these varieties were not fully suited to Victorian conditions and because of their susceptibility to disease.

Greater stability has been given to the industry with the release by the Victorian Department of Agriculture of disease resistant and better adapted varieties.

Victorian linseed contains 38 to 40 per cent of oil of satisfactory quality. Linseed oil is one of the main components of paints, varnishes, and linoleum, and also has many other industrial uses. The meal or press cake which remains after the oil has been extracted is a valuable stock food.

VICTORIA—LINSEED PRODUCTION

Season	Area	Production	Average yield per acre	Gross value
	acres	bushels	bushels	\$'000
1965-66	7,370	101,536	13.78	358
1966-67	5,012	92,752	18.51	302
1967-68	9,365	32,176	3.44	104
1968-69	14,304	203,140	14.20	658
1969-70	18,880	187,039	9.91	1,167

Tobacco

Flue-cured Virginia tobacco is the only type produced in quantity in Australia and is mainly absorbed in the manufacture of cigarettes. The use of domestic leaf is encouraged by a statutory mixing percentage applied in conjunction with concessional rates of import duty. The statutory percentage is currently set at 50 per cent and at the present high level of usage it is important that only leaf of desirable smoking quality is produced. Such leaf can be grown with some certainty only in areas having sandy friable soils and, during the summer months, with appreciable rainfall, moderate temperatures, and high atmospheric humidity.

The Victorian crop usually accounts for rather more than one third of the total Australian tobacco production. Suitable growing conditions are found in the north-eastern river valleys, and the industry is concentrated at present along the Ovens and King Rivers and their tributaries, with small outlying areas in the northern part of the State. Recent trends disclose a concentration of production in the higher parts of these valleys, with some contraction at certain climatically less favoured downstream centres and in the inundated area above the Buffalo River dam. The Mount Beauty district in the upper Kiewa Valley has also become established as a reliable centre for the production of good quality leaf.

Tobacco growing in Australia has traditionally been regarded as a rather speculative proposition due to wide fluctuations in production and market conditions, and it is only in the past decade that any degree of stability has become apparent. This has been due to a consistent upward trend in average yield which has resulted in the Victorian figure approaching a level comparable to that achieved by the world's major tobacco producing countries.

The fungus disease, blue mould, has often brought about drastic reduction of yield and has been the prime cause of most short Victorian crops in the past. At present growers are able to control this disease by implementing newly developed fungicidal spray programmes, and this is perhaps the main factor in current yield improvement.

The implementation in 1965 of a Tobacco Stabilisation Scheme, whereby a market is guaranteed for the annual sale of up to 34 million lb of leaf meeting certain quality standards, has promoted further stability in the industry.

Victorian tobacco producers are assisted in their efforts to increase yield and improve leaf quality by the Department of Agriculture, which conducts research in agronomy, plant pathology, and plant breeding at the Tobacco Research Station at Myrtleford and its substation at Gunbower, and also provides an intensive farm to farm advisory service for growers.

VICTORIA—TOBACCO PRODUCTION

Season	Area	Production	Average yield per acre	Gross value
	acres	cwt (dry)	cwt (dry)	\$'000
1965-66	9,230	98,953	10.72	12,377
1966-67	8,455	97,792	11.57	11,938
1967-68	8,664	68,076	7.86	7,915
1968-69	9,727	107,812	11.08	13,910
1969-70	11,015	138,536	12.58	15,348

Further reference, 1963; Marketing of tobacco, 1969

Fruit industry

Victoria is a major producer of a wide variety of fruit and about 120,000 acres are used for orchards and vineyards. The three most important districts are the area within 50 miles of Melbourne (apples, dessert tree fruits, and berries), the Goulburn Valley (canning fruit), and the Mallee region (vine fruit and citrus).

Most of the fruit growing districts south of the Dividing Range receive an annual rainfall of between 25 and 35 inches. This rainfall is fairly evenly spread, but in many areas additional irrigation is essential from January to March. This water is supplied from natural catchments, rivers, or town supplies. The north-eastern section of the State has a rainfall of from 20 to 40 inches, but the average rainfall in the Goulburn Valley is 19 inches and in the Mallee only 10 inches. In these districts elaborate irrigation schemes of the Lower Murray Valley and of the Goulburn and Campaspe Rivers make possible the large scale development of the fruit industry. The distribution of water is effected mainly by gravity except for small areas of citrus under spray irrigation.

Because of the high capital expenditure invested in orchard land and equipment and with the keen competition for local and overseas markets, most Victorian growers realise that they have to produce increased quantities of better quality fruit without increasing costs. To achieve this, labour expenses are cut by high capacity spraying units for pest control and by bulk handling of the crop. Many orchardists use fruit thinning sprays to make hand thinning less time consuming. The increasing use of weedicides in orchards and vineyards has reduced the need for cultivation. Lighter pruning of apples is showing promising results in southern Victoria and this trend could also become an important factor in reducing labour costs.

Statistics on fruit growing are collected from all persons who grow fruit for sale (for all purposes). Particulars of fruit production (excluding vines) for the five seasons 1965-66 to 1969-70 are given in the following table :

VICTORIA—FRUIT GROWING

Particulars		1965-66	1966-67	1967-68	1968-69	1969-70
Number of growers		4,435	4,563	4,221	4,197	3,937
Area	acres	75,001	73,519	71,158	71,598	70,883
Gross value of fruit produced	\$'000	34,977	32,327	34,462	30,804	..
Kind of fruit—						
Apples	bushels	4,206,028	4,356,989	3,874,995	4,857,746	5,330,770
Pears	"	5,453,339	4,700,818	5,341,706	3,419,992	7,043,916
Quinces	"	21,946	25,089	15,935	17,515	22,257
Apricots	"	545,547	529,551	503,965	440,205	574,483
Cherries	"	140,207	120,731	178,410	148,824	141,741
Nectarines	"	33,323	36,723	37,372	33,358	34,502
Peaches	"	2,602,822	2,731,525	3,344,333	2,721,995	2,974,780
Plums	"	154,453	147,643	145,202	124,591	114,003
Prunes	"	20,397	21,421	15,892	12,874	18,416
Lemons and limes	"	120,554	147,881	169,596	215,255	163,930
Oranges—						
Navels	"	437,318	454,929	452,903	527,480	504,589
Valencias	"	537,940	660,194	638,522	808,095	742,038
Other oranges	"	36,389	28,647	29,849	24,217	33,216
Mandarins	"	41,207	64,350	80,286	81,181	77,752
Grapefruit	"	82,399	73,273	86,954	95,498	111,382
Figs	"	1,314	1,127	602	1,049	626
Passionfruit	"	3,520	3,914	5,356	5,532	4,534
Olives	"	36,471	15,030	38,070	23,957	34,595
Gooseberries	cwt	735	872	599	380	609
Loganberries	"	1,098	909	819	641	470
Raspberries	"	3,268	2,859	3,091	2,138	3,266
Strawberries	"	19,947	24,387	30,464	33,473	38,415
Youngberries	"	4,711	4,044	4,403	2,695	4,786
Other berries	"	666	903	771	331	843
Almonds	lb	51,322	32,522	34,484	17,947	33,657
Filberts	"	12,060	11,680	5,840	2,935	6,608
Walnuts	"	138,930	69,606	158,272	182,889	149,698

The production of the principal kinds of dried tree fruits for each of the last five seasons is shown in the following table. Particulars in respect of dried vine fruits appear on pages 333-4.

VICTORIA—DRIED TREE FRUITS
(lb)

Season	Apricots	Peaches	Pears	Prunes	Others	Total
1965-66	6,824	2,340	2,467	447,760	3,332	462,723
1966-67	16,175	716	250	306,958	215	324,314
1967-68	18,407	3,628	4,313	230,560	481	257,389
1968-69	29,832	3,038	9,916	164,909	70	207,765
1969-70	4,726	784	..	198,333	..	203,843

Cool storage

The fruit industry has been well aware of the importance of refrigeration since the end of the last century. Before the First World War several co-operative and privately owned cool stores had been built, besides the first Government Cool Stores, at Flinders Street, Melbourne. The Government also built and operated five other stores situated in the fruit growing districts close to Melbourne. These have been gradually handed over to growers' co-operatives.

The extension of electric power to rural areas throughout the State has resulted in the construction of numerous small private cool stores. More efficient refrigeration techniques and insulating materials have also helped to spread the idea of cool storage. Since the Second World War there has been a rapid increase of cool store capacity in Victoria, mainly because of the very rapid development of small cool stores built in individual orchards.

Many of the small orchard cool stores are used to pre-cool highly perishable soft fruits (apricots, peaches, plums, and berries) and tomatoes before they are forwarded to Melbourne or interstate markets. These fruits ripen in the summer and at high summer temperatures often become over-ripe and worthless in the interval between picking and marketing, unless pre-cooled at the orchard within a few hours of picking.

Most of the orchard cool stores, situated within 50 miles of Melbourne, are used, together with the larger co-operative and proprietary stores, to achieve a more gradual marketing of Victoria's apple and pear crop. This supply of good quality fruit from store at regular intervals for a period of 6-9 months calls for considerable skill and knowledge. The fruit picked is still alive and continues its living processes for a certain time, influenced by the variety, its ripeness at the time of harvesting ("picking maturity"), interval between harvesting and beginning of cool storage, temperature and humidity of cool chambers, and other factors. Cool storage behaviour of the fruit and the type of storage provided are also of great importance with the fruit exported to overseas markets.

To assist the industry with cool storage research, experimental cool chambers were set up at the Government Cool Stores, Victoria Dock, in 1923. In 1956 these were transferred to the Scoresby Horticultural Research Station, where large and better experimental chambers were constructed for this purpose.

Vine fruits

Most vine fruits grown in Victoria are marketed as dried fruits (currants, sultanas, and raisins). Smaller quantities are sold as fresh fruit or are used

for wine production. Some 50,000 acres of vines are grown in the irrigated districts of the River Murray at Mildura, Robinvale, and Swan Hill. The climate at Mildura and Robinvale provides the high temperatures and clear sunny conditions during the growing season and drying period which are essential for the production of first quality dried fruit. The Swan Hill district with slightly lower temperatures and higher rainfall is less suitable than Robinvale and Mildura.

After dipping and sun drying by the grower, the dried fruit is processed and packed in packing houses. The production of dried fruits in Victoria for the season 1969-70 amounted to 63,801 tons of sultanas, 3,383 tons of currants, and 3,269 tons of raisins. Approximately 70 per cent of this produce was exported.

During recent years the growing of grapes for table use has expanded rapidly and with some growers has become a specialised industry. The main varieties are Waltham Cross, Purple Cornichon, Ohanez, Sultana, and Muscat. Melbourne and Sydney are the main market outlets, but Indonesia, Colombo, and Singapore may grow in importance as export markets.

Grapes are grown specifically for wine production at Rutherglen, Great Western, and Nagambie. While the wine growing area around Rutherglen is slowly expanding, increasing quantities of grapes for winemaking are produced in the River Murray irrigation districts. In 1969-70, 7.2 million gallons of wine were produced.

Particulars of vine production for the five seasons 1965-66 to 1969-70 are given in the following table :

VICTORIA—VINE FRUIT PRODUCTION

Season	Number of growers	Area		Production				
		Bearing	Not bearing	Grapes gathered	Wine made	Dried fruits		
		acres	acres	'000 cwt	'000 gals	Raisins cwt	Sultanas cwt	Currants cwt
1965-66	2,561	44,788	3,829	5,660	3,152	141,206	1,047,149	62,545
1966-67	2,538	45,381	3,783	6,530	3,555	125,085	1,266,927	71,552
1967-68	2,490	44,802	3,923	5,975	5,180	101,014	1,083,418	63,314
1968-69	2,443	44,719	4,251	4,101	6,241	71,461	686,456	53,740
1969-70	2,493	45,647	4,191	6,771	7,251	65,388	1,276,025	67,669

Growing of grapes for wine, 1964; Dried fruits industry, 1967; Wine, 1968

Vegetables

The climate of Victoria is such that practically every kind of vegetable can be grown in some part of the State during the favourable season in each area. Consequently, there is a plentiful supply of fresh vegetables on the market for the whole year in normal years. These vegetables (excluding potatoes and onions), worth about \$24m to Victoria, are harvested from about 50,000 acres.

Almost half the area under vegetables is within 50 miles of Melbourne. Other vegetable producing centres south of the Dividing Range are in the Western District (the centre of processed pea production) and in Gippsland (the centre of the stringless bean growing industry for processing and also for seed bean production). These areas are fairly free of frosts and have

a well distributed annual rainfall ranging from 20 to 35 inches. Vegetables are grown on a wide variety of soils (sand, sandy loam, clay loam, peat, and volcanic). Many vegetable growers use irrigation from town water supplies, storage catchments, streams, and dams to supplement rainfall.

North of the Dividing Range the summer is longer and hotter, but winter frosts are more frequent. Many areas along the lower Murray are ideal for growing early spring crops and efficient transport enables produce to be shipped to both Melbourne and Sydney. In some instances intercropping in orchards and vineyards is practised. Tomato production for processing is now largely concentrated in the Goulburn Valley but other important production areas are situated along the Murray and Loddon Rivers and in the Maffra irrigation district in Gippsland. The greatest part of the Victorian crop comes from the Goulburn Valley.

Returns from vegetable growing can fluctuate greatly according to weather and market conditions and production methods have to be highly efficient. Market gardens near Melbourne may grow two and sometimes three crops in the one year. While a number of hand operations are still essential, mechanisation and the use of selective weedicides have greatly reduced labour costs. Peas, beans, and onions can be harvested mechanically and a number of mechanical aids are used for harvesting other crops. New varieties and improved storage and transport techniques have also increased production efficiency.

While most crops reach the consumer as fresh vegetables, an increasing amount of produce is being processed and a feature of the Victorian industry is the rapid increase in the production of peas and beans for freezing.

Details of the area, production, and gross value of vegetables are given in the table below for all the more important types, including potatoes and onions which are shown in greater detail under separate headings on pages 328-9.

VICTORIA—VEGETABLES FOR HUMAN CONSUMPTION,
1969-70

Type	Area sown	Production	Gross value
	acres	tons	\$'000
Potatoes	39,765	279,553	17,002
Onions	3,296	21,339	1,469
Carrots	2,264	30,986	2,394
Parsnips	565	6,318	992
Beetroot	203	1,966	75
Tomatoes	4,982	61,437	4,138
French beans	3,239	6,418	1,054
Green peas—			
Sold in pod	3,399	5,056	2,121
Canning, etc. (pod equivalent)	25,010	(a) 39,422	3,375
Cabbages	1,816	21,002	777
Cauliflowers	2,360	40,696	2,605
Brussels sprouts	673	2,032	660
Lettuce	2,175	14,086	2,634
Pumpkins	1,946	8,947	716
Other vegetables	4,367	22,747	2,538
Total	96,060	562,005	42,550

(a) Shelled weight 17,724 tons.

Minor crops

There are other crops cultivated in Victoria in addition to those enumerated on pages 312-3. The most important of these are nursery products, cut flowers, Japanese millet, sunflowers, agricultural seeds, vegetable seeds, and safflower.

Pastoral and dairying*Progress of stock breeding*

The first great development in Victoria, or as it was then known, the district of Port Phillip, was the pastoral interest. Millions of acres of lightly timbered land lay before the newcomers, and the quickest way to wealth was evidently by the division of the land into runs and the depasturing of sheep and cattle. Settlers and stock came at first from Tasmania and eventually from New South Wales.

According to early statistical records, there were 26,000 sheep, 100 cattle, and 57 horses in the Colony on 25 May 1836. On 1 January 1841, as a result of five years of livestock importation and breeding, there were 782,283 sheep, 50,837 cattle, and 2,372 horses. By 1 January 1851 the livestock population had increased to 6,032,783 sheep, 378,806 cattle, 21,219 horses, and 9,260 pigs.

The following table shows the number of livestock in Victoria at decennial intervals from 1861 to 1961 and the numbers of livestock on rural holdings for each of the five years 1966 to 1970. As from 1957 no allowance has been made for the small number of livestock not on rural holdings.

VICTORIA—LIVESTOCK
(‘000)

Year	Horses (including foals)	Cattle (b)		Sheep	Pigs
		Dairy	Beef		
1861 at 31 March	77		722	5,781	61
1871 " "	167		721	10,762	131
1881 " "	276		1,286	10,360	242
1891 " "	436		1,783	12,693	282
1901 " "	392		1,602	10,842	350
1911 at 1 March	472		1,548	12,883	333
1921 " "	488		1,575	12,171	175
1931 " "	380		1,430	16,478	281
1941 " "	318		1,922	20,412	398
1951 at 31 March	186	1,489	727	20,012	237
1961 " "	64	1,717	1,147	26,620	319
1966 " "	(a)	1,921	1,416	30,968	384
1967 " "	55	1,968	1,560	31,239	351
1968 " "	(a)	1,963	1,511	27,909	377
1969 " "	(a)	1,960	1,918	30,185	422
1970 " "	(a)	1,975	2,488	33,157	495

(a) Not collected.

(b) Separate figures for beef and dairy cattle are not available for years before 1943.

A table showing the sizes of holdings and the numbers of holdings depasturing stock at 31 March 1966 appears on page 309. Dot maps showing the distribution of livestock on rural holdings in Victoria at 31 March 1962 appear on pages 577 to 580 of the *Victorian Year Book* 1964.

Following an investigation into the adequacy of the wording and layout of the cattle sections of the Agricultural, Dairying, and Pastoral Statistics form, changes were introduced to the 1963-64 form.

Before 1964 farmers were asked to classify their herds as either "beef cattle" or "dairy cattle". As these two terms tended to confuse breed and purpose, farmers were asked in the new design to classify their cattle, with the exception of bulls, according to the two main purposes of (i) milk production and (ii) meat production, irrespective of breed, and to report separately the number of cows and heifers kept for their own domestic milk supply; bulls were to be reported according to their breed and age, i.e., dairy or beef and over or under one year of age. Consequently, the detailed statistics of cattle for 1970 set out in the following table are not comparable with those for years prior to 1964.

VICTORIA—DISTRIBUTION OF LIVESTOCK AT 31 MARCH 1970
(‘000)

Particulars	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-eastern	North-eastern	Gippsland	
Cattle—									
Bulls for service—									
Bulls, 1 year and over—									
Dairy breeds	5	1	8	1	(a)	7	2	9	34
Beef breeds	8	3	15	2	1	7	8	9	54
Bull calves—under 1 year—									
Dairy breeds	2	(a)	3	(a)	(a)	3	1	3	14
Beef breeds	4	2	7	1	1	3	3	3	24
Cows and heifers for milk and cream—									
Cows in milk	128	12	178	6	11	264	39	293	931
Cows—dry	44	7	112	4	3	36	35	73	314
Heifers—1 year and over	44	6	75	3	4	81	20	88	322
Heifer calves—under 1 year	42	6	78	3	5	90	19	92	335
House cows and heifers	4	2	5	4	2	4	3	2	25
Other cattle and calves for meat production—									
Cows and heifers	180	80	335	44	26	138	202	217	1,222
Calves—under 1 year	115	49	188	34	23	123	123	153	809
Other	56	24	76	9	7	51	69	87	379
Total cattle	633	192	1,082	110	84	808	522	1,031	4,462
Pigs	75	14	44	46	40	167	49	61	495
Sheep	2,595	2,652	12,004	5,185	2,229	4,442	2,005	2,046	33,157

(a) More than nil but less than 500.

Changing patterns in animal husbandry, 1963

Fodder conservation

The intensification of fodder conservation has been a natural development in farm management following pasture improvement and increased capacity for the carrying of livestock.

Even the best pastures do not provide a full ration for grazing animals throughout the year because of seasonal variations in their growth. In addition, droughts and other circumstances, such as floods or fires, have serious effects on the amount of grazing available. In most cases these feed shortages must be met by fodder conservation and hand feeding. Fodder conservation is, therefore, a highly important farm activity without which stable livestock production could not be maintained at high levels.

In Victoria, meadow hay is the main fodder conserved, being cheaply and readily available from surplus spring pasture growth in most seasons. In fact, this source of fodder is not fully exploited, since, while individual farms may cut 25 per cent or more of their farms for hay, on average less than 10 per cent of the State's improved pastures are cut each year. Nevertheless, Victoria produces some 60 per cent of Australia's meadow

hay, although it has only about 30 per cent of Australia's sown grasses and clovers. Cereal hay (mainly oaten) is also made in large quantities, especially in drier districts and in drier years, i.e., in circumstances where good pasture production may be irregular, or low due to poor spring rains.

Lucerne hay is generally produced as a quality fodder intended for cash sale, and considerable quantities are conserved, especially in irrigated areas. However, the excellent quality of much of the clover and grass hay made from improved pastures has lessened interest in lucerne for general on-farm bulk reserves although there is currently considerable interest in its use in prepared formulated feeds, and also for its possible export to overseas countries. Oat grain, which is easily stored, transported, and rationed, is an important livestock fodder favoured for sheep in both cereal growing and grazing districts. More recently wheat has also been used, farmers having become familiar with its use as a result of its enforced feeding in widespread drought conditions in 1967. Silage occupies a relatively minor position in the fodder conservation of the State, although important to dairy farmers meeting wholemilk supply contracts in dry farming areas. Silage is also used successfully for feeding beef cattle, and has special value as a drought reserve.

Most hay in Victoria is made with the mower, side-delivery rake, and pick-up baler. About one in six farms has a baler. After mowing, the crop dries for a time in the swath, and is then raked for further drying in the windrow before it is baled. Some farmers are using systems of loose hay handling and self-feeding based on simple low cost equipment, especially in northern areas or where short-term storage of hay is involved for early feeding needs.

Sometimes baled hay intended for summer or early autumn feeding is left in the paddock for self-feeding by the stock. Provided the hay is well made and, preferably, stored in stooks, there is little wastage in such temporary storage, especially if feeding is controlled. Long-term storage requires adequate protection, such as is given by a well constructed shed. A new technique of haymaking, unique to Australia, has been the practical development of a machine that rolls hay directly from the windrow into large cylindrical rolls that are usually left as completed, for later self-feeding. When tightly made such rolls weather well throughout summer and autumn and provide a valuable early ration for stock. For best effect, their feeding is chiefly controlled by temporary fencing or heavy ("mole") stocking; less often they may be picked up by a buckrake type device and stored or carted to the stock. It is likely that fodder rolling—as this technique is called—will become more widespread because of its simplicity and potentially high capacity and cheapness.

In recent years, increasing interest has been taken in new machines and techniques aimed at faster drying of hay. This is a most significant development, since it makes possible further increases in hay production as well as the production of higher quality hay because better use is made of the limited drying time available when the crop is at its best. The types of machines used include tedders, which loosen and aerate the hay lying in swath or windrow; conditioners, which crush or crimp fresh hay between rollers and enable internal moisture to move faster through the fractured cuticle of the plants; and rotary slashers and flail mowers, in which cutting by high speed impact replaces conventional mowing and the drying rate

may increase as a result of the bruising and cuticle damage that the crop experiences. Very fast drying is given with the flail mower when the flail rotor is set to distribute the cut material evenly and lightly across as wide a swath as possible. If the flail cuts too fast the cut material can pack too tightly for even, fast drying, but rather lumps and dries slowly.

The rotary slasher, if well designed and operated, can prove a suitable substitute for the conventional mower in rough conditions, for it is a robust machine, having developed from an intended specific use for slashing rough weeds and other growth. However, it does not speed up drying as much as the flail, although it is usually as fast as the conventional mower and occasionally faster if the cut swath is evenly spread.

Ensilage

Much ensilage is still made in open stacks using a mower and buckrake. This is simple, but wastage is high. The flail-type forage harvester is popular because of simple cutting action and relative cheapness. It consists of swinging blades which rotate at high speed on a horizontal shaft. The crop is thrown into an accompanying trailer or truck for transport to storage. Flail cutting has opened the way to more effective ensilage making and control of the process because the cut material packs better in storage, thereby excluding air and so preventing the heating which destroys nutrients and lowers digestibility of the resulting silage. Improved storage and feeding techniques are generally leading to more effective use of ensilage than is possible with high wastage open stack methods. Trenches and pits, if suitably sited and well made, provide excellent storage conditions. Stacks with clamp sides or bunkers also give good storage, while plastic sheeting can also be used to exclude air and water and thus reduce waste when properly applied.

Further references, 1963, 1965-1971

Dairying industry

In 1970, for the first time in its history, the dairying industry in Victoria (and Tasmania) was asked to reduce its production of milk for manufacture, as compared with the level reached in the previous season. The request was made by the Australian Dairy Industry Council in view of the prospect that, should the trend towards increased production continue, some butter would have to be sold, if at all, at very low, unprofitable prices. By October 1970 this "containment" programme was suspended because of the unexpectedly large shortfall in production in dairying districts of Queensland and New South Wales affected by drought. In the longer term, however, the industry still faced the prospect of severe curtailment of its sales to Britain, its most important export market for dairy products, if that country, together with Denmark and Ireland, were to join the European Economic Community.

In the preceding years dairy farmers in Victoria had been increasing their herds and output in order to offset the narrowing gap between costs of production and returns from sales of milk, while those without this potential left the industry. This trend began after 1956-57, when the number of dairy farms in the dairying districts reached its highest point of 26,952, carrying 912,633 cows or an average of 34 cows per farm. By 1969-70 the number of such farms had fallen to 19,068. The number of milking cows, however, had risen to 1,220,656, or 64 cows per farm.

Production containment was a serious matter for those farmers who had planned to increase their herds in order to maintain a satisfactory profit margin. Many reared their herd replacement calves on nurse cows in order to divert some milk from factory supply and to eliminate the cost of buying calf feed. Many also turned their attention to the rearing of surplus calves for meat production. Taking advantage of artificial breeding, some farmers mated a part of the herd to bulls of beef breeds, but there was a very large increase in the use of Friesian bulls, whose progeny are well suited to either milk or meat production.

Victoria now produces 53 per cent of Australia's milk, mainly from some 13,000 farms carrying 50 or more cows. These are usually viable economic units, the exceptions being those farms bought in recent years at unreasonably high prices. Most are committed to dairying; 12,741 have bulk milk tanks, of which 8,298 are refrigerated. Some 1,600 farmers with herds between 40 and 49 cows could earn a satisfactory living if they were free of debt and elected to leave the problem of depreciation to the future. Some 4,400 farmers with less than 40 cows derive only part of their income from dairying.

About 7,000 dairy farmers supply a part of their output to the Milk Board for the market milk trade.

VICTORIA—DAIRYING

At 31 March—	Number of cow keepers	Number of dairy cows	Estimated total production of milk for all purposes (year ended 30 June)	Gross value of dairy produce (a)
		'000	'000 gals	\$'000
1966	(b)	1,192	751,564	190,141
1967	(b)	1,211	790,941	210,345
1968	(b)	1,200	734,451	181,541
1969	27,061	1,209	815,791	202,245
1970	27,057	1,245	897,326	223,617

(a) Includes subsidy.

(b) Not collected.

VICTORIA—BUTTER, CHEESE, CONDENSED AND POWDERED MILK, AND CASEIN MADE ('000 lb)

Year ended 30 June—	Butter (a)	Cheese (a)	Condensed milk	Powdered full-cream milk	Casein
1966	250,680	58,158	122,650	24,506	48,531
1967	266,907	67,907	113,559	24,188	38,509
1968	241,240	73,570	95,064	24,258	37,399
1969	280,206	75,256	90,716	30,608	59,323
1970	313,753	73,866	93,102	28,575	45,638

(a) Small quantities of butter and cheese made on farms are excluded from the above table.

Further reference, 1971; Eradication of tuberculosis, 1962; Sharefarming in the dairying industry, 1967; Milk Board, 1971

Pig industry

Victoria is one of the major pig producing States of Australia. In the past a substantial part of her supplies of pig meat came from other States but as a result of the development of the pig industry in Victoria most of the pig meat consumed in Victoria nowadays is produced in this State.

Australians are relatively large meat eaters but eat much less pig meat than most other nations. Pig meat provides only about 10 per cent of the total meat consumed by Australians. That is due partly to traditional eating habits, and partly to the relative costs of sheep, poultry, and cattle meat, produced on low cost pasture, and pig meat, produced from concentrate foods such as grain. Pigs have a limited capacity for consuming pasture. Pigs have always been used to salvage waste and by-products from the production, processing, and eating of human foods. The low cost of such foods enables pigs to be raised and sold profitably. When the supply of salvage fed pigs is insufficient to satisfy demands, grain and other foods are fed to pigs in increasing quantities, either with the salvaged foods or separately. Such pig production is more costly and is therefore sensitive to variations in the selling price of pigs. The pig industry was developed largely in conjunction with the dairy industry. Pigs were used to salvage separated milk, buttermilk, and whey, the by-products of butter, cheese, and casein manufacture, and those foods provided the greater part of their diet. In the 1950s and 1960s more milk was used for human food and less was available for pigs. Pig production then became less dependent on milk but more on grain feeding, protein foods, animal by-products such as meat, bone meal, fish meal, and whale solubles. With this change in the major source of food for pigs, the structure of the pig industry changed to fewer but larger pig herds.

Pigs mature early, are prolific, and grow fast. A sow can produce a litter of eight pigs when she is twelve months old, her pigs can be ready for pork when three and a half to four months old, or for bacon when five to six months old, and then the sow can produce her second litter. There are large variations in the annual production of pigs and this causes fluctuations in the prices farmers receive for their pigs. The variations in supply are caused more by the rapid production potential of pigs, and the absence of adequate forward information on trends, than by changes in seasonal conditions. There is usually ample grain to maintain pig production. There is no scheme to support pig prices in Australia.

In the 1930s and early 1940s Australia exported pig carcasses, mainly to the United Kingdom, where it had a protected market. In 1941 over one third of Australia's pig production was exported. Since then, production and demand have come closer together and only an insignificant part of the country's production is exported.

Most pig raising units now provide the major part of the income from the farms concerned. More capital and skilled management are involved in the individual units.

The number of pigs in Victoria at 31 March 1970 was 495,128. About 70 per cent of these are held in the Central, Western, Northern, and Gippsland districts. The following table shows classifications (in statistical districts) of pigs, together with the numbers of pig keepers :

VICTORIA—PIGS AND PIG KEEPERS, 31 MARCH 1970

Statistical District	Boars	Breeding sows	All other	Total pigs	Pig keepers
Central	955	10,337	63,529	74,821	823
North-Central	259	1,989	11,595	13,843	361
Western	822	6,517	36,404	43,743	959
Wimmera	862	6,322	39,089	46,273	1,229
Mallee	992	5,901	32,650	39,543	977
Northern	2,232	24,919	139,702	166,853	1,631
North-Eastern	838	6,956	41,162	48,956	793
Gippsland	977	8,666	51,453	61,096	897
Total	7,937	71,607	415,584	495,128	7,670

The following table shows the latest statistics available of the number of dairy herds (in size groups) separated into those where pigs are held, and those where no pigs are held. The sizes of pig herds are also shown.

VICTORIA—PIG KEEPING IN CONJUNCTION WITH DAIRYING:
NUMBER OF HOLDINGS AT 31 MARCH 1969

Size of dairy cattle herd (numbers)	Size of pig herd (numbers)								Holdings with—		
	1-4	5-9	10-14	15-19	20-29	30-49	50-99	100 and over	Pigs	No pigs	Dairy cattle
1-4	178	104	59	35	46	64	54	36	576	3,487	4,063
5-9	109	59	41	19	43	43	40	14	368	1,582	1,950
10-14	69	40	39	17	23	27	33	12	260	939	1,199
15-19	38	31	19	17	22	19	18	14	178	661	839
20-29	70	52	30	24	47	34	25	24	306	965	1,271
30-49	91	90	80	34	95	85	69	37	581	1,741	2,322
50-69	70	81	75	63	107	123	90	47	656	2,008	2,664
70-99	58	60	62	60	137	205	212	98	892	3,644	4,536
100-149	47	38	41	34	67	161	273	175	836	4,637	5,473
150 and over	36	14	14	15	26	38	103	194	440	2,300	2,740
Total	766	569	460	318	613	799	917	651	5,093	21,964	27,057

*Sheep industry**Sheep breeds*

The first sheep to arrive in Victoria were Tasmanian Saxon Merinos which were brought to the Portland area by Edward Henty in December 1834. In the following year William Furlonge landed Saxon Merinos at Port Phillip, and so shared with Henty the distinction of founding the sheep industry in Victoria. Sheep numbers increased rapidly until the early 1840s, largely because New South Wales pastoralists brought their flocks southwards and John Batman's Port Phillip Association landed Saxon Merinos from Tasmania. In November 1836 there were only 41,000 sheep in Victoria, increasing to 310,000 by 1838; two years later the sheep population was 782,000. By 1851 Victoria had over six million sheep. At this time most of the available pastoral land had been taken up and was being used for grazing.

Despite periodic droughts, Victorian sheep numbers have shown a steady trend upwards. At the census of 31 March 1970 the State had 33 million sheep, which was 17 per cent of the total Australian sheep population. The geographical distribution of all sheep and rams in Victoria is shown on pages 343-4.

VICTORIA—GEOGRAPHICAL DISTRIBUTION OF BREEDS OF SHEEP (INCLUDING RAMS) AT 31 MARCH 1970

Breed	Statistical District								Total	Percentage of total sheep
	Central	North-Central	Western	Wimmera	Mallee	Northern	North-Eastern	Gippsland		
Merino	735,224	1,464,079	5,365,284	3,961,971	1,109,238	1,845,513	840,630	895,917	16,217,856	48.91
Crossbred	1,023,874	658,105	2,235,958	594,032	796,931	1,903,793	705,485	758,250	8,676,428	26.17
Corriedale	342,423	185,555	2,084,491	330,438	91,260	236,366	155,526	134,122	3,560,181	10.74
Merino Comeback	162,033	218,406	961,050	118,132	85,314	165,714	131,480	128,118	1,970,247	5.94
Polwarth	156,927	21,529	710,727	9,893	3,045	28,331	59,034	9,836	999,322	3.01
Border Leicester	56,442	41,635	124,983	88,093	71,153	112,055	34,987	40,807	570,155	1.72
Romney Marsh	15,300	4,934	339,610	19,059	7,494	5,503	15,962	24,850	432,712	1.31
Dorset Horn	45,210	25,679	85,237	36,323	42,119	86,398	39,599	19,769	380,334	1.15
Poll Dorset	17,630	13,663	15,924	10,441	19,247	24,393	8,672	9,511	119,481	0.36
Southdown	28,990	12,893	37,590	1,090	422	12,869	3,762	12,967	110,583	0.33
Zenith	1,878	1,523	22,663	14,702	707	17,370	4,320	16	63,179	0.19
Ryeland	3,789	2,097	5,118	44	289	1,554	2,495	3,446	18,832	0.06
Cheviot	1,799	524	2,852	8	110	547	322	2,303	8,465	0.02
English Leicester	56	691	1,581	195	5	511	1,129	2,860	7,028	0.02
Perendale	2,150	141	1,773	17	..	207	840	1,052	6,180	0.02
Suffolk	1,070	109	1,566	40	364	30	84	280	3,543	0.01
All other	532	678	7,267	162	1,149	546	445	1,525	12,304	0.04
Total	2,595,327	2,652,241	12,003,674	5,184,640	2,228,847	4,441,700	2,004,772	2,045,629	33,156,830	100.00

Relative to other States (except Tasmania) the most noticeable feature of Victorian sheep numbers is the smaller proportion of Merinos (49 per cent) and the larger proportion of crossbred and comeback sheep (32 per cent) and breeds other than Merino (19 per cent). By comparison the Australian flock consists of Merinos (73 per cent), comebacks and crossbreds (15 per cent), and other recognised breeds (12 per cent). These figures indicate the importance to Victoria of the prime lamb industry which is largely based on first cross ewes (Border Leicester x Merino) and British breed rams.

Although Victoria has relatively fewer Merinos, they produce the finest quality wool. In particular, wools from the Western District enjoy a world wide reputation for their colour, style, fineness of spinning count, and their high yielding properties. With the exception of the Mallee and Wimmera and parts of the Northern District, where the South Australian types of Merino are more numerous, a majority of Merinos found in Victoria are fine- and medium-woolled types.

Corriedales comprise 11 per cent of the sheep population of Victoria. The breed is noted for its production of high quality, fine crossbred wool, and its meat producing ability. The breed originated in 1874 in New Zealand. However, it was not until 1882 when Henry Corbett mated Merino rams to Lincoln ewes, and fixed this "half-bred" type, that the breed was established in Australia. Corriedales are found throughout most of Victoria with a heavier concentration in the Western District.

Like the Corriedale, the Polwarth is regarded as a dual-purpose animal and is based on Lincoln ($\frac{1}{4}$) and Merino ($\frac{3}{4}$) blood lines. The breed was developed in Victoria for those areas which were believed to be too wet and cold for Merino wool growing. It comprises 3 per cent of the total sheep numbers and is concentrated in the southern parts of the Western District, the Central District, and the North-Eastern District.

The main British breeds of sheep in Victoria are the Romney Marsh, Border Leicester, Dorset Horn, Poll Dorset, and Southdown. Romney Marsh and Border Leicester rams are often joined with Merino ewes to produce prime lamb dams. Southdown, Dorset Horn, and Poll Dorset rams are the most important sires for prime lamb production.

VICTORIA—BREEDS OF SHEEP (INCLUDING RAMS)

Breed	31 March 1965		31 March 1968		31 March 1970	
	Number	Percentage of total	Number	Percentage of total	Number	Percentage of total
Merino	14,148,138	46.48	12,810,165	45.90	16,217,856	48.91
Dorset Horn	423,600	1.39	409,774	1.47	380,334	1.15
Corriedale	4,581,697	15.05	4,081,828	14.63	3,560,181	10.74
Border Leicester	394,872	1.30	509,229	1.82	570,155	1.72
Southdown	108,588	0.36	108,508	0.39	110,583	0.33
Polwarth	1,224,100	4.02	981,631	3.52	999,322	3.01
Romney Marsh	592,460	1.95	597,952	2.14	432,712	1.31
Ryeland	28,076	0.09	18,816	0.07	18,832	0.06
Poll Dorset	30,811	0.10	106,562	0.40	119,481	0.36
English Leicester	13,415	0.05	8,144	0.03	7,028	0.02
Cheviot	16,551	0.06	10,152	0.04	8,465	0.02
Zenith	45,938	0.15	56,493	0.20	63,179	0.20
Suffolk	2,912	0.01	4,365	0.02	3,543	0.01
Shropshire	426	(a)	1,708	0.01	542	(a)
Lincoln	18,765	0.06	6,881	0.02	4,953	0.01
Other (including Merino comeback and other crossbreds)	8,806,805	28.93	8,196,546	29.34	10,659,664	32.15
Total	30,437,154	100.00	27,908,754	100.00	33,156,830	100.00

(a) Less than 0.01 per cent of total.

The numbers of each of the breeds are continually changing as a result of seasonal conditions throughout the State and the relative prices of wool, meat, and cereal grains. In a poor season sheep numbers may decrease as a result of lower lambing percentages and increased slaughtering of "fat" stock. There is often a large seasonal variation in sheep numbers because of movement of fat and store sheep between Victoria and New South Wales and South Australia.

The numbers of sheep in Victoria in selected years since 1861 are shown in the table on page 336. The distribution of all livestock is shown in the table on page 337.

The increase in sheep numbers in recent years has been due to pasture improvement and intensification of stocking rates on established improved pastures.

However, factors such as seasonal conditions, prices of wool, mutton, lamb, and to a lesser degree, wheat, affect the number of sheep in the State in any given year. In an adverse season flocks may be reduced by lack of fodder or water, by the increase in the slaughtering of fat stock, or by the decrease in lambing. Decreased imports from other States are another factor. In addition to the seasonal movements of sheep from New South Wales and South Australia for agistment, there is a regular importation of sheep from those States for slaughtering purposes.

Lambing

Climatic conditions also play a large part in determining the proportion of lambs marked to ewes mated, and thus the natural increase from season to season may vary considerably. The following table shows the number of ewes mated or intended to be mated, the number actually mated, and lambs marked, in each of the five seasons 1966-67 to 1970-71 :

VICTORIA—LAMBING

Season	Ewes intended for mating	Ewes actually mated	Lambs marked	Proportion of lambs marked to ewes mated
	'000	'000	'000	per cent
1966-67	12,674	12,605	10,626	84
1967-68	13,205	12,476	10,101	81
1968-69	11,797	11,557	9,255	80
1969-70	14,037	13,910	12,266	88
1970-71	14,830	14,841	12,724	86

Sheep and lambs in statistical districts

The following table sets out the number of rams, ewes, wethers, and lambs depastured in each statistical district of the State at 31 March 1970, and lambing details for the 1969 season.

VICTORIA—SHEEP AND LAMBS IN EACH STATISTICAL DISTRICT AT
31 MARCH 1970
(000)

Particulars	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-eastern	North-Eastern	Gipps-land	
Rams	31	26	137	49	25	56	24	24	372
Ewes	1,300	1,154	5,815	2,316	1,356	2,532	1,071	1,085	16,630
Wethers	707	990	2,979	1,711	323	961	544	448	8,663
Lambs	557	481	3,072	1,109	525	892	366	488	7,492
Total sheep and lambs	2,595	2,652	12,004	5,185	2,229	4,442	2,005	2,046	33,157

VICTORIA—LAMBING, 1969-70 SEASON

Particulars	Statistical District								Total
	Central	North-Central	Western	Wimmera	Mallee	North-ern	North-Eastern	Gipps-land	
Ewes mated '000	1,141	972	4,833	1,804	1,093	2,158	960	949	13,910
Lambs marked '000	1,067	857	4,183	1,524	973	1,943	831	888	12,266
Percentage	94	88	87	84	89	90	87	94	88

The following table sets out on a statistical division basis the numbers of ewes mated or intended to be mated for the 1970 lambing season classified according to whether the progeny is intended for wool or fat lamb production :

VICTORIA—LAMBING FORECAST: EWES MATED OR INTENDED TO BE MATED FOR LAMBING DURING 1970 SEASON

(As advised by farmers at 31 March 1970)
('000)

Statistical Division	Breed of ram used—				
	Merino	Corriedale or Polwarth	Shortwool breeds	Longwool breeds	Total
Melbourne	21	28	175	16	240
Central	197	148	323	32	701
North Central	380	76	404	119	979
Western	2,489	1,368	954	479	5,291
Wimmera	1,148	204	320	228	1,900
Mallee	222	48	551	258	1,079
Northern	441	116	1,245	379	2,181
North Eastern	362	139	771	154	1,426
Gippsland	251	85	452	105	893
East Central	8	6	120	7	140
Total	5,519	2,217	5,316	1,778	14,830

Production of wool

Statistics of wool production are obtained direct from growers, from fellmongeries and, for wool exported on skins, from the Department of Customs and Excise.

VICTORIA—SHEEP AND LAMBS SHORN, SEASON 1969-70

Statistical District	Shorn		Wool clipped (including crutchings)		Average	
	Sheep	Lambs	Sheep's	Lambs'	Per sheep	Per lamb
	'000	'000	'000 lb	'000 lb	lb	lb
Central	2,312	658	24,284	1,920	10.50	2.92
North-Central	2,627	574	28,852	1,684	10.98	2.93
Western	11,246	3,483	117,813	10,820	10.48	3.11
Wimmera	4,775	1,303	53,312	4,000	11.16	3.07
Mallee	1,837	519	20,367	1,620	11.09	3.12
Northern	4,211	1,077	45,260	3,299	10.75	3.06
North-Eastern	2,086	446	21,454	1,193	10.28	2.67
Gippsland	1,879	578	18,858	1,623	10.04	2.81
Total	30,974	8,638	330,201	26,159	10.66	3.03

VICTORIA—SHEEP SHORN AND WOOL CLIPPED

Season	Shorn		Wool clipped (including crutchings)		Average	
	Sheep	Lambs	Sheep's	Lambs'	Per sheep	Per lamb
	'000	'000	'000 lb	'000 lb	lb	lb
1965-66	29,668	8,003	285,564	21,779	9.63	2.72
1966-67	29,553	7,605	292,627	22,080	9.90	2.90
1967-68	28,304	6,940	257,042	17,787	9.08	2.56
1968-69	28,653	6,227	280,511	18,471	9.79	2.97
1969-70	30,974	8,638	330,201	26,159	10.66	3.03

VICTORIA—WOOL PRODUCTION AND VALUE

Season	Clip	Stripped from and exported on skins, etc. (greasy)	Total quantity (greasy)	Gross value	Average price per lb
	'000 lb	'000 lb	'000 lb	\$'000	cents
1965-66	307,343	59,601	366,943	193,797	52.81
1966-67	314,707	63,750	378,457	180,946	47.81
1967-68	274,829	57,598	332,427	133,213	40.07
1968-69	298,983	65,364	364,347	155,547	42.69
1969-70	356,511	70,879	427,390	154,693	36.19

Australian Wool Board

The present Australian Wool Board was established in May 1963, replacing the former Australian Wool Bureau. The Board consists of eleven members—a chairman, six woolgrower representatives, three members with special qualifications and a representative of the Commonwealth Government. The first chairman of the Board was appointed by the Minister for Primary Industry after consultation with the Australian Wool Industry Conference. Subsequent chairmen are to be appointed by the Minister for Primary Industry after consultation with the Board. The six woolgrower representatives are appointed by the Minister on the nomination of the A.W.I.C. while the three members with special qualifications have, to date, been appointed from a panel of names submitted by the Conference. These three members do not represent any particular interests but must be experienced in one of the following fields: wool marketing or manufacturing, wool research, finance and commerce. Members of the Board are appointed for a term of three years but their appointments are so timed that they retire in rotation (except for the chairman and the government representative).

Following the organisational changes carried out under the Wool Industry Act, the work of the Board has developed as follows :

1. Wool promotion, technical services, and product development in Australia and overseas.
2. Provision of a testing service for wool and wool products. This service is administered by a subsidiary body, the Australian Wool Testing Authority. It is used extensively by exporters of greasy, scoured, and carbonised wool to establish the moisture content of wool for invoicing purposes. Many other

tests are provided by the Authority such as yield determination for greasy wool, micron measurement of greasy wool and wool tops, and various performance tests for wool yarn and textiles.

3. Maintenance and administration of the wool stores which were entrusted to the Board by the Commonwealth Government.

4. Wool handling and transportation investigations covering movement from shed to mill, including integrated handling, selling and dumping facilities (wool complexes).

5. Responsibilities towards the framing of research programmes in wool economics, wool production, and wool textile research supported by finance from the Wool Research Trust Fund.

6. In February 1970 the Board appointed a sixteen-member advisory committee which seeks to recommend policies for the short and long term future of the woolgrowing industry.

7. The Board has committees examining how the industry can derive maximum benefit from present and anticipated wool measurement techniques, both objective and subjective, covering the fields of wool classing, transport and handling, selling, processing, and manufacturing.

Important modifications to the Australian wool auction system have also been originated by the Board, culminating in the formation of The Australian Wool Marketing Corporation Pty Ltd, which will administer the marketing changes to commence in the 1970-71 selling season.

The Board reports annually to the Commonwealth Government as well as to the Australian Wool Industry Conference which was formed in 1962. The principal function of the A.W.I.C., which is composed of representatives of Federal woolgrower industrial organisations, is to act as a link between woolgrowers, the Government, and the Australian Wool Board. The A.W.I.C. is able to advise the Government on policy matters, and in particular to consider reports and submissions from the Australian Wool Board.

Research and promotion for the wool industry have been financed by government contributions and a levy on woolgrowers. In April 1970 the wool industry accepted a Commonwealth offer increasing the Government's contribution to wool research and promotion funds. For three years from 1 July 1970 the Government will increase its present contribution for research and promotion from a maximum of \$14m a year to an average of \$27m annually. At the same time, the existing levy on woolgrowers of 2 per cent of the gross value of shorn wool production will be halved to 1 per cent.

Wool marketing system, 1961-1968; Pastoral industry, 1963; Sheep and wool growing districts, 1967

Meat industry

The farmlands of Victoria have proved most suitable for meat production and about 30 per cent of Australia's red meat is produced in this State.

The American market has brought big changes to the beef industry since the United States is interested mainly in lean meat. The demand created to supply this market has lifted the prices of bulls, dairy and beef cows, and what are known to the trade as store cattle. The prices for these cattle are close to the prices paid per 100 lb dressed weight (chilled carcass) of the traditionally prime cattle used extensively in supplying the local trade.

The local market for lamb has always been good but the demand for

export lamb is irregular largely because of variations in quality and supply affecting price. Grading is largely a matter of fatness and the leaner, meatier types used locally are the most profitable to produce in areas where lambs can be carried through for marketing from February to September. The supply of lambs is less from areas where the season favours marketing from February to September and growers have more control over lamb selling at prices above export parity.

Boneless mutton exports mainly to the United States and Japan have provided a good market for old sheep which at one time brought low prices for canning and small goods.

Pig production varies every few years but the trend is generally upward, in line with the human population. Almost all the pig meat produced is eaten in Australia. Although the consumption of pig meat per head of population in Australia is increasing slowly, it is only 10 per cent of the total meat consumption and is low in relation to that of other nations. There is considerable interstate trade in pig meat, as Victoria and New South Wales are net importers from the other States.

Table poultry production has changed dramatically in Victoria in recent years. The development of large modern production units has resulted in a big increase in broilers, turkeys, and ducks and consequent reduction in prices. Few people are keeping poultry for their own domestic requirements and consequently more poultry is purchased.

Australian Meat Board, 1971

Broiler industry

The raising of chickens for meat on a large scale has emerged in Victoria since the mid-1950s. Chickens are most efficient in converting poultry feeds, grains, and protein supplements to meat, and are also multiplied cheaply and rapidly through scientific breeding and modern artificial incubation methods.

It now takes approximately 2.4 lb of poultry feed to produce 1 lb of poultry meat, and a 4 lb chicken is grown in nine weeks. This efficient conversion and rapid growth has been achieved by extensive breeding programmes; the use of "high energy" poultry feeds, highly supplemented with vitamins and minerals; growth promoters and disease control drugs; and by the development of enclosed, factory-like broiler houses, with controlled temperature, humidity, ventilation, and light, all conducive to fast growth.

The organisation of the broiler industry as a continuous, production-line, factory-like operation, has been a major factor in the great reduction in price to consumers. Breeders, hatcheries, contract growers, poultry processors, and distributors have all co-ordinated to ensure efficient and continuous production. Seasonal effects are no longer a consideration and prices do not fluctuate. As a result, poultry meat, once a luxury, is now cheap and a normal part of the diet. Turkey meat is also cheap and plentiful.

The main broiler production centres are located on the Mornington Peninsula and in areas south-east and east of Melbourne and the Geelong area near the processing works and the main centres of consumption. Most of Victoria's production is consumed locally; very little is exported, while considerable numbers of interstate broilers are imported.

Broiler houses are fully enclosed; each house grows a "crop" of about

10,000 to 15,000 broilers, about four times a year. Chickens are stocked at a rate of 0.6 to 0.8 sq ft of floor space per bird. A one-man or one-family farm raises approximately 120,000 to 200,000 birds a year. Growers are usually contracted to supply large broiler organisations which hatch and supply the specially bred meat chickens and receive broilers back for processing and distribution.

Egg industry

The trend in the Victorian egg industry is towards large specialised farms—egg producers, hatcheries, and pullet growers—utilising modern poultry housing, equipment, and labour saving machinery.

The greater proportion of the State's estimated 4 million adult female fowls are now part of the commercial egg industry. There are, however, large numbers of small household flocks in suburban and country areas. The main areas of commercial production are centred on the outskirts of the Melbourne metropolitan area and in the Bendigo district, with large centres around Ballarat and Geelong, and substantial populations in the Wimmera, Goulburn Valley, and north-east.

One-man or one-family farms usually manage 5,000 to 6,000 layers. There are, however, many larger farms employing labour, with up to 20,000 layers, and a smaller number of much larger farms.

Housing is planned on the intensive principle, with deep litter pens or multiple bird cage units. Most of the new housing is on the laying cage system. A small proportion of layers is kept in fully enclosed, windowless houses under a fully controlled environment. Artificial lighting is used on almost all commercial egg farms to stimulate egg production. Feeding is based on grains (wheat, oats, and barley) and their by-products (bran and pollard). Meatmeal is the major protein supplement. Wide ranges of commercial, ready-mixed poultry rations are also available.

Laying stock consists mainly of a specially produced crossbred between the White Leghorn and Australorp breeds. The average State egg production is estimated at approximately 215 eggs per bird per year. Commercial stock of the local breeding farms and hatcheries is tested for profitability at the Department of Agriculture's Random Sample Laying Test at Burnley. Chicks are hatched continuously throughout the year with an emphasis on the June–November period. Hatcheries are large and use modern incubators from 5,000 to 90,000 egg capacity. Most commercial egg-type chicks are sexed when a day old by machine or hand methods and the cockerels discarded. The main power source used in the brooding of chicks is electricity, but gas brooders and hot water brooders fired by oil burners are also used.

The marketing of eggs is controlled by the Victorian Egg and Egg Pulp Marketing Board. Flocks with over twenty adult female fowls come within the Board's jurisdiction, and owners of flocks with over forty adult female fowls are required to market their eggs through the Board. Victoria produces a surplus of eggs which is exported through the Australian Egg Board.

Advisory and research services to the egg industry are provided by the Department of Agriculture, commercial firms concerned with the sale of feed, chicken drugs, and equipment, and by the University of Melbourne.

Egg marketing

A monthly collection of statistics on chicken hatchings and poultry slaughterings was commenced in Victoria in January 1966 and the following table summarises the results for each of the years 1965-66 to 1969-70:

VICTORIA—HEN EGGS SET AND CHICKENS HATCHED
(‘000)

Period	Hen eggs set (a)	Chicks hatched (b) intended to be raised for—				Total hatched
		Meat production	Egg production	Breeding		
				Pullets	Cockerels	
MEAT STRAINS						
1965-66	18,758	13,705	(c) 20	3	13,727	
1966-67	19,626	14,486	(c) 7	1	14,494	
1967-68	20,655	15,806	(c) 1	1	15,809	
1968-69	20,120	15,546	(c) ..	..	15,546	
1969-70	21,945	17,334	(c) ..	..	17,334	
EGG STRAINS (d)						
1965-66	10,956	2,135	3,710	202	41	6,087
1966-67	12,206	1,509	4,114	217	30	5,869
1967-68	12,578	1,567	4,251	209	31	6,059
1968-69	13,104	880	4,455	184	26	5,545
1969-70	14,439	1,464	4,977	211	30	6,683

(a) Includes eggs which failed to hatch.

(b) Excludes chicks destroyed.

(c) Not applicable.

(d) Egg strain chicks reported as “unsexed” have been allocated half to chicks for meat production and half to chicks for egg production. The number so reported was 907,295 in 1965-66, 486,340 in 1966-67, 410,129 in 1967-68, 223,321 in 1968-69, and 172,222 in 1969-70.

VICTORIA—POULTRY SLAUGHTERED FOR HUMAN CONSUMPTION
(‘000)

Period	Chickens (i.e. broilers, fryers or roasters)	Hens and stags	Ducks and drakes	Turkeys				
1965-66	12,039	1,013	326	67				
1966-67	13,570	911	253	166				
1967-68	15,519	990	248	95				
1968-69	13,832	1,326	272	114				
1969-70	16,562	1,643	246	172				
DRESSED WEIGHT OF POULTRY SLAUGHTERED (a), AND INTENDED FOR SALE (b) (’000 lb)								
	Fresh	Frozen	Fresh	Frozen	Fresh	Frozen	Fresh	Frozen
1965-66	19,487	9,508	2,556	820	793	536	105	565
1966-67	20,020	14,742	2,520	449	728	169	131	1,487
1967-68	19,053	22,333	2,963	355	635	248	145	818
1968-69	21,093	18,393	3,791	1,876	1,815	190	204	844
1969-70	26,750	18,309	4,402	1,423	783	97	1,655	

(a) Dressed weight of whole birds, pieces and giblets as reported by producers.

(b) Fresh: Sold immediately after slaughter or chilled for sale soon after.

Frozen: Frozen hard for storage of indefinite duration.

(r:) Revised.

The preceding statistics have been compiled from returns submitted by all known Victorian hatchers and all poultry slaughterers slaughtering more than 1,000 birds annually. It is considered that they give a high level of coverage of chicken hatchings and poultry slaughterings in Victoria.

Stock slaughtered

The following table shows the number of slaughtering establishments and details of the stock slaughtered in the State during each of the five years 1965-66 to 1969-70:

VICTORIA—STOCK SLAUGHTERED (a)

Particulars	Stock slaughtered in establishments and on farms and stations				
	1965-66	1966-67	1967-68	1968-69	1969-70 (b)
	'000	'000	'000	'000	'000
Sheep	8,160	7,310	9,227	5,609	7,376
Lambs	5,205	5,875	5,816	7,102	6,785
Bulls and bullocks	270	244	237	270	356
Cows	558	485	516	401	445
Young cattle	359	361	337	339	382
Calves—Bobby	622	570	673	433	414
Other	44	77		29	28
Pigs	705	699	701	775	842
Number of slaughterhouses	262	263	240	247	253

(a) Includes numbers of livestock condemned as being unsuitable for human consumption.

(b) Average dressed weights per carcass during 1969-70 were: sheep 48.24 lb, lambs 36.08 lb, bulls and bullocks 596.7 lb, cows 436.7 lb, young cattle 342.1 lb, bobby calves 39.7 lb, other calves 113.02 lb, and pigs 106.7 lb.

Frozen meat exported, 1969**Honey industry**

Victoria's hardwood forests each year provide an important contribution to the wealth of the State by virtue of timber production for various purposes. However, one little known facet of forest productivity is the annual harvest of honey and beeswax collected by bees from many species of eucalypts in all parts of the State. Today, Victoria ranks second among the States in apicultural activities. Eucalyptus species provide the bulk of the honey crop—up to 95 per cent of the total—with the balance made up of ground flora species such as clover and Paterson's Curse.

In recent years some concern has been felt in the industry at the increasing pressure for alienation of some types of Crown land for agricultural purposes. Much of this land has in the past been reliable bee keeping country because of its natural tree and shrub flora. These lands are generally cleared after alienation and so are lost for honey production. Parts of the Mallee, Wimmera, Western District, and north-east are areas most affected. The wood chip industry may adversely affect honey production in parts of Gippsland.

There are some 1,240 apiarists in Victoria with five or more hives. These apiarists produce an average of 8 million lb of honey per annum. Hive yields are relatively good and range from 90 to 150 lb per annum. The larger commercial enterprises would average 200 lb per annum.

The industry is, of necessity, migratory, whole apiaries with attendant plant being moved by road transport from one part of the State to another, following the flowering of various species of honey flora in the forests and on the farm lands. Hives, trucks, and plant have been designed and modified to suit the requirements of mobility demanded by the industry.

Pollination of agricultural crops is a further aspect of the industry which has received considerable attention. Each year in the past, thousands

of colonies have been hired out to fruit and seed growers to ensure profitable sets of seed and fruit. However, in recent years the advent of the newer types of insecticides and their increasing popularity, especially with fruit growers, has caused concern amongst apiarists, most of whom are no longer prepared to lease hives of bees for pollination because of serious bee losses following spray application of certain types of insecticides. It is anticipated that, with the increasing use of some of these chemicals, pollination of agricultural crops may become a serious problem in Victoria and elsewhere. The application of insecticides with the spreading of super-phosphate on pastures, especially in irrigation areas, is also causing concern.

Marketing has always been a great problem to the industry. Violent fluctuations in the annual honey crop are always, in the absence of any organised marketing scheme, attended by similar fluctuations in prices. Considerable carry-overs occasionally aggravate this. However, late in 1962 the Commonwealth Parliament passed enabling legislation for the establishment of the Australian Honey Board. The functions of the Board are to regulate export of, and export prices for, honey. The activities of the Board are financed by means of a levy on domestic consumption of honey and a publicity and research programme is being implemented.

In 1967 the Australian Honey Board established a finance scheme to enable apiarists to hold stocks of honey off the market in times of glut or poor prices. Since 1968 a number of equalisation proposals have been considered by producers to stabilise the industry but none have yet been adopted.

State interest in the industry is authorised by the *Bees Act* 1966 and extends to disease control, advisory services, research into the problems of the industry, and hygiene in the production and processing of honey. An Apicultural Research Unit is in operation at the Scoresby Horticultural Research Station.

Particulars relating to apiculture for the five years 1966 to 1970 are given in the following table. Since 1958 bee keepers with less than five registered hives have been excluded from the collection.

VICTORIA—BEE HIVES, HONEY, AND BEESWAX

Season ended 31 May—	Bee keepers number	Hives number	Production		Gross value	
			Honey '000 lb	Beeswax '000 lb	Honey \$'000	Beeswax \$'000
1966	1,243	101,387	9,608	115	1,403	55
1967	1,158	96,274	7,160	88	1,045	44
1968	1,298	95,108	7,580	92	1,114	67
1969	1,240	99,953	3,638	50	520	37
1970	1,256	102,100	8,220	103	800	65

PRIMARY INDUSTRIES OTHER THAN FARMING

Forestry

Forest estate

Of the 56,245,760 acres in Victoria, the forest estate consisted of 5,656,671 acres of reserved forest at 30 June 1970 and over this area

the Forests Commission had full control. Only a proportion of this reserved forest produces commercial timber, as large areas come within the category of protection forests and are of value in safeguarding the State's water catchments. In addition, the State Forests Department has partial control over some 9 million acres of unoccupied Crown land which must, therefore, be included in the forest estate. These Crown lands include areas of mallee scrub and alpine grasslands as well as good timbered country.

The Forests Commission of Victoria was established by the *Forests Act* 1918 and consists of a chairman and two commissioners. Subject to the *Forests Act*, the Commission has the exclusive control and management of all matters of forest policy, the granting of leases, licences, permits, and authorities, and the collection of rents, fees, royalties, and other revenue. It is the duty of the Commission to carry out plans and works for the establishment, maintenance, improvement, and renewal of natural forests and plantations of indigenous and exotic trees. It is also responsible for the prevention and suppression of fires, the training of forest officers, conduct of research work, provision of facilities for public recreation, and the protection of native flora and fauna in State forests.

Forest timber

The following table summarises the total output of all species from all forests in the State (including privately owned lands) for the years 1965-66 to 1969-70:

VICTORIA—FOREST TIMBER
(’000 cu ft)

Item	1965-66	1966-67	1967-68	1968-69	1969-70
Logs for sawing, peeling, slicing, or pulping—					
Hardwoods	69,499	68,880	70,129	75,022	72,199
Softwoods (plantation grown pines)	14,377	15,325	14,037	17,001	19,553
Total logs	83,876	84,205	84,166	92,023	91,752
Hewn and other timber (not included above)					
estimated volume—					
Firewood (a)	18,572	14,990	12,293	10,718	9,854
Other (b)	5,475	4,793	4,677	4,194	4,192

(a) Excludes mill waste used as firewood.

(b) Includes telephone and electric supply transmission poles, bridge and wharf piles and beams, fencing timbers, railway sleepers, and mining timbers from Crown lands. Similar information for private lands is not available.

The output of sawn timber from Victorian sawmills in 1969-70 was the highest for many years despite the fact that credit restrictions announced in April caused some slackening of activity towards the end of the year. The high output of sawn timber, however, was not reflected in a corresponding high intake of logs from State forests. In fact the production of hardwood logs fell by about 3 per cent due partly to wet weather interrupting harvesting. The demand for softwood logs was strong and production reached the highest recorded level.

The demand for hardwood pulp remained high and production from State forests increased by 5 per cent over the previous year. Softwood pulp production showed a sharp increase over previous years and negotia-

tions are under way with additional users which could increase the demand still further.

The number of sawmills operating in the State continued to decrease. The main reason for this trend was that a number of sawmilling businesses have been purchased by other sawmillers to achieve better economies associated with bigger mill throughputs.

Softwood plantations

Large scale plantings of softwood species were continued particularly in the north-east and south-western parts of the State. A total of 9,939 acres was planted in 1969-70 and it is proposed to increase the rate of annual planting to 12,000 acres under the Commonwealth—States Softwood Forestry Agreement.

Pinus radiata has proved itself adaptable to the sites available ; it makes rapid growth, is hardy and relatively immune from insect and fungus attack, and produces a good quality timber. While *Sirex noctilio*, the wood wasp, has been found within commercial plantations in Victoria, good management techniques have so far prevented it from causing any losses of consequence in softwood plantations.

Whenever large areas are planted with a single species, other species, not necessarily of commercial importance, are planted on about 2 per cent of the net planted areas. These plantings are strategically located to improve the aesthetic values of the area. In addition native hardwood forests are retained along major roads through plantations.

Privately owned softwood plantations were estimated to comprise 113,966 acres at 31 October 1969, and the areas are steadily increasing. Large industrial companies are planting *Pinus radiata* to provide sustained yields of softwood for sawmilling and wood-fibre industries. Private individuals plant small areas as long-term investments and many State schools maintain small endowment plantations.

The *Land (Plantation Areas) Act 1959* is designed to encourage private establishment of softwood plantations by providing that Crown lands suitable for commercial plantations and unsuitable for agriculture may, with certain safeguards, be leased for timber growing purposes and subsequently sold to the lessee.

During 1964-65 an amendment to the *Forests Act 1958* was passed enabling loans of up to \$50 per acre to be advanced to landowners for planting softwood species on land approved by the Commission as being capable of producing an economic crop. The basic intention is to encourage farmers to establish farm woodlots by providing funds interest free for the first 12 years to cover expenses.

The output from State plantations is summarised below:

VICTORIA—OUTPUT FROM STATE PLANTATIONS
OF SOFTWOOD LOGS AND PULPWOOD
(’000 cu ft)

Year	Sawlogs and peeling logs	Pulpwood
1965-66	4,412	2,408
1966-67	4,830	2,323
1967-68	4,618	1,968
1968-69	4,425	1,589
1969-70	5,403	2,006

Telecommunications

The Commission's telecommunications system consists of 46 base stations, 190 mobiles, 180 hand held portables, and 450 portable/mobile radios. In addition, twenty stations are equipped with receivers for receipt of weather information and three trailer-mounted base stations are held for use in fire emergencies. Three hundred and sixty-five miles of telephone lines erected by the Commission are maintained each year prior to and during the fire season.

Fire protection

The Forests Commission is responsible for the prevention and suppression of fires in all States forests and national parks and in certain alienated lands within one mile of State forest or national park. This area of responsibility is legally designated the Fire Protected Area. Legislation provides strict control over the lighting of fires, power to prohibit the use of fire, and to close down certain operations in the Fire Protected Area during any period of extreme fire danger.

The causes of fires attended by Forests Commission personnel in the period 1965-66 to 1969-70 were as follows:

VICTORIA—CAUSES OF FOREST FIRES

Cause	Number of fires				
	1965-66	1966-67	1967-68	1968-69	1969-70
Grazing interests	1	..	4	..	1
Landowners, householders, etc.	115	90	169	64	49
Deliberate lighting	57	104	167	74	43
Sportsmen, campers, tourists	63	33	51	20	37
Licenses and forest workers	20	15	56	18	14
Smokers	50	36	61	15	27
Lightning	83	41	67	95	37
Tractors, cars, trucks, locomotives, and stationary engines	16	35	50	25	15
Children	21	9	19	13	13
Sawmills	8	8	15	7	6
Miscellaneous known causes	32	44	53	45	22
Unknown origin	63	71	75	15	40
Total	529	486	787	391	304

Forest fires 1969-70

Summer in Victoria is usually characterised by a long dry period with many days of high temperature and strong winds. However, in 1969-70 there were heavy spring rains which delayed curing of fuels and further rain in January and February which made the fire season one of the mildest on record. There was a short period in April when strong winds for several successive days caused fires to burn out of control in the western part of the State.

Aircraft in fire control

Because of the almost complete absence of fires in remote mountain areas there was no requirement to use the helicopter or firebombers which the Commission retain on charter for fire suppression. However, research work continued into the technique of firebombing to improve its performance as

a first attack tool. The Commission now has five firebombing bases and two more are under construction.

Fuel reduction by burning

The problem of fire control is basically a problem of controlling the vast accumulation of dead fuel which occurs within eucalypt forests. In early times this fuel was periodically burnt by fires started by lightning and Aborigines with the result that forest fires were slower and less destructive than they are today. Prescribed burning is now used deliberately to control fuel quantities over large areas of forest. Techniques have been established which allow this to be done with a maximum of safety and at times and places where its ecological effects are compatible with forest management.

The areas of State forest burnt by wildfires in the period 1965-66 to 1969-70 were as follows :

VICTORIA—AREAS OF STATE FOREST BURNT
(acres)

Year	Commercial area	Non-commercial area	Total
1965-66	20,313	50,733	71,046
1966-67	7,830	30,689	38,519
1967-68	306,350	240,698	547,048
1968-69	36,969	34,638	71,607
1969-70	3,401	9,175	12,576

Forest management

The basic principle upon which Victorian State forests are managed is that of multiple use. The basic concept is that all resources are entitled to consideration but, in practice, the priority of use varies from place to place. It does not necessarily mean that every forest is managed to achieve several objectives to an equal extent at all times. It simply means that notwithstanding a primary objective, other benefits may be obtained without prejudice to the main objective. Multiple use does not preclude single use management on specific areas within the forest estate; therefore, the forest resource can provide even the most demanding of conservation objectives such as wilderness and water supply.

Timber supplies

The volume of timber to be harvested from the forests is carefully regulated to maintain the long-term productivity of the forests and to ensure steady output for the industries which use their products. The allowable rate of harvesting is determined by measurements of the forests and predictions of the rates of growth.

In the native forests the rates of growth and harvesting are monitored by making periodical remeasurements of the trees on several hundred sample areas which are taken to represent the whole forest.

Comprehensive information on the growth of the softwood plantations and the regrowth forest of mountain ash have been assembled in computer programs which will calculate their future growth and production under many different plans of management. This enables the development of the forests to be simulated for study purposes so that the best plan of management may be selected.

Forest recreation

The traditional objectives of forest management such as meeting the demand for timber and other forest products, preservation of satisfactory water catchment conditions, and erosion control are now being rivalled by increasing requirements by the general public for outdoor recreation, preservation of habitats for fauna, and a variety of historical and scenic attractions.

There are 89 forest parks, including four new parks declared during 1969-70, alpine reserves, and scenic reserves, totalling 63,715 acres where recreational and similar uses have been made the primary aim of management.

This is evidence of the increasing attention being given to this type of forest use.

Laboratory and field research

Studies of fire behaviour in a wide range of types of forests under various weather conditions are contributing to improvements in fire fighting methods, and also in methods of using controlled fire for protection of the forests, regeneration of new crops, maintenance of suitable habitats for wildlife, and other forestry purposes.

Aerial techniques have been developed for regeneration of logged areas of natural forest. Chemicals applied from agricultural aircraft desiccate scrubby growth to prepare the ground for seeding. Good control of drift during applications is obtained by using invert spray emulsions. An efficient system has been developed to spread the fine eucalypt seed evenly at the required rate.

The rapid increase in area of forests of radiata pine is supported by a vigorous research programme. The nutrition of the pine is being studied in the nurseries and on new plantation sites, and the early growth of the pines is also being improved by new methods of controlling wattles, and other competing vegetation. A tree improvement research programme has been in progress for some years, and a study of the wood grown in various types of plantations on various sites is in hand.

Entomological studies are being conducted to aid the control of some serious forest pests including the Sirex wasp and Phasmatids. Three forms of natural parasite are being used to combat the Sirex wasp; they include two wasps and a nematode or eel worm which are parasitic on the Sirex. In addition to these measures, trees infested with Sirex are being destroyed as part of the National Sirex Campaign.

Further references, 1965-1971; Fire protection, 1965; Economic aspects of forests, 1967; Commonwealth-State Reforestation Agreement, 1969; Forests (1967-68), 1970

Fisheries and wildlife

Practical management of the fish and wildlife resources of Victoria is vested in the Department of Fisheries and Wildlife, which is responsible to the Chief Secretary for the administration of the Fisheries Act and the Game Acts, and for conservation, management, and research on native and introduced fishes, birds, and mammals.

The State Freshwater Fisheries Research Station and Native Fish Hatchery are located at Snobs Creek, near Eildon. A wildlife research

centre is being developed at Lara, near Geelong. Fisheries and Wildlife officers (enforcement staff) are stationed at eighteen district centres throughout the State, and eight more district stations are proposed.

Arthur Rylah Institute for Environmental Research

On 8 April 1970 the Arthur Rylah Institute for Environmental Research at Heidelberg was officially opened by Her Majesty the Queen. The building was designed for the Department of Fisheries and Wildlife by the Public Works Department. The Institute was named after Sir Arthur Rylah, K.B.E., C.M.G., E.D., the Chief Secretary for Victoria from 1955 to 1971, as a tribute to his contribution to the conservation of nature in Victoria.

The concept of conservation, even in the context of the Rylah Institute, includes that of the conservation of man. Other aspects are use of natural resources, the aesthetic factors in the environment, and the question of the ethical use of resources to meet the needs of the present community as well as those of succeeding generations.

A thorough knowledge of the environment is the prerequisite to conservation. Therefore, within the limits of its charter but not in isolation, the Rylah Institute was constructed to provide the basic data, facts, and inventories which will permit the interpretation and the assessment for the proper use of the resources of the soil, water, and air.

The building consists of a main three storey block which comprises the laboratories and offices of the research and management sections concerned with marine and freshwater fisheries, wildlife, game, and environmental studies. At the front of the building there is an adjoining annex and this contains a library and a conference room, capable of accommodating ninety persons. The workshop and aquarium at the rear is separated from the main structure by an open courtyard. There is a natural history survey room which is mainly a museum for the storage and study of research specimens, documented ecological information, and maps. There is also a data processing laboratory which will ultimately be able to sort and analyse much of the accumulated information. One laboratory is devoted to the planning of habitat management works, while many chemical analyses required by various sections of the Department can be undertaken in the environmental studies section. An animal room is provided to house small animals for intensive study.

Many of the special items of equipment required by the various research groups within the Department are designed and constructed in the workshop. The environmental studies laboratory is equipped for chemical analysis of pesticide residues and pollutants and is provided with modern research equipment.

Many environmental factors influence the behaviour and physiology of aquatic organisms. Within the aquarium room there are up to seventy individual tanks which may be supplied with freshwater or seawater at controlled flow rates and temperatures and purified by filtration and ultra-violet irradiation.

The conference room and library are in a self-contained annexe and this makes it especially useful for evening meetings of organisations with interests allied with those of the Department. The room is designed and furnished to be readily adaptable for lectures and conferences and is equipped for film projection, recording, and the mounting of demonstrations and displays.

Fisheries statistics

The statistics of production shown in the following tables are in terms of live weight for fish, crustaceans, and molluscs. In interpreting fisheries statistics, allowance should be made for the incomplete coverage. Returns are collected from licensed professional fishermen only, and as a result the published totals fall short of total fish production to the extent of the catch by amateur fishermen, the commercial catch by persons not licensed as professional fishermen, and unrecorded catch by professional fishermen.

The following table shows the catch of fish, crustaceans, and molluscs for the years 1965-66 to 1969-70 landed at Victorian ports irrespective of the waters in which they were caught. Also included are fish, etc., landed by Victorian fishermen in South Australia.

The following table shows certain particulars about the fishing industry in Victoria for the years 1965-66 to 1969-70:

VICTORIA—FISHERIES : MEN, BOATS, AND EQUIPMENT

Year	Registered crew members	Boats registered		Value of nets and other equipment
		Number	Value	
			\$'000	\$'000
1965-66	1,566	910	4,432	821
1966-67	2,057	1,108	5,903	1,078
1967-68	2,053	1,084	6,808	1,153
1968-69	1,571	871	5,363	1,047
1969-70	1,429	795	4,966	944

VICTORIA—FISHERIES : QUANTITY AND GROSS VALUE OF TAKE

Year	Recorded production							
	Fish		Rock lobster (a)		Prawns		Molluscs	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
	'000 lb	\$'000	'000 lb	\$'000	'000 lb	\$'000	'000 lb	\$'000
1965-66	18,466	2,231	1,681	1,177	11	6	29,509	989
1966-67	16,048	1,959	1,723	1,034	11	6	32,674	1,981
1967-68	17,016	2,253	1,533	1,027	5	3	35,889	2,618
1968-69	23,568	2,678	1,581	1,455	5	3	16,028	1,695
1969-70	35,235	3,137	1,788	1,500	2	2	9,718	941

(a) Includes freshwater crayfish.

VICTORIA—CATCH OF FISH, CRUSTACEANS, AND MOLLUSCS
(⁰000 lb live weight)

Species	1965-66	1966-67	1967-68	1968-69	1969-70
Freshwater fish—					
Eel	175	221	235	288	272
English perch	97	145	141	53	19
Golden perch	27	21	11	6	6
Tench	26	20	28	31	18
Other	17	14	8	16	26
Total	342	421	423	394	341
Marine fish—					
Anchovy	375	441	343	2,395	n.a.
Bream, black	235	490	726	709	1,060
Flathead, rock	252	257	291	243	260
Flathead, tiger	961	1,136	1,209	1,662	2,018
Flounder	135	151	160	130	190
Garfish, sea and river	275	358	369	510	490
Luderick	147	110	83	96	152
Morwong (jackass fish)	427	272	155	284	152
Mullet, yellow-eye	640	607	513	497	630
Pike, long-finned	100	107	133	94	76
Pilchard	502	112	98	1,370	n.a.
Salmon, Australian	1,805	1,252	1,303	943	1,142
Shark, gummy	1,725	1,840	2,240	2,350	2,327
Shark, saw	350	254	212	369	274
Shark, school	3,172	3,556	3,319	3,739	4,641
Snapper	343	349	374	423	487
Snoek (barracouta)	5,268	2,791	3,676	5,360	5,558
Trevally	96	105	102	112	102
Whiting, King George	70	246	286	160	168
Whiting, school	140	234	175	363	562
Other	1,106	960	825	1,367	1,978
Total	18,124	15,628	16,592	23,175	34,895
Crustaceans—					
Rock lobster (a)	1,681	1,723	1,533	1,581	1,788
Prawns	11	11	5	5	2
Total	1,692	1,734	1,538	1,586	1,790
Molluscs—					
Abalone	961	3,379	7,470	5,751	4,712
Mussels	425	260	247	119	516
Scallops	27,957	28,726	27,896	9,885	4,164
Other	166	309	276	272	326
Total	29,509	32,674	35,889	16,027	9,718
Total all species	49,667	50,457	54,442	41,182	46,744

(a) Includes freshwater crayfish.

n.a. : Not available separately for publication, included in total.

Further references 1961-1971; Wildlife in relation to other natural resources, 1962; Introduced fish, 1963; Commercial fisheries, European carp, 1964; Freshwater research, 1965; Marine fisheries, 1966; State wildlife reserves system, 1966; Scallop fishery, 1967; Serendip Wildlife Research Station, 1968; Tower Hill State Game Reserve, 1969; Rehabilitation of species, Arthur Rylah Fish and Wildlife Research Institute, 1970; Economic aspects, 1971

Mining

The most notable recent development in Victoria's mineral industry, besides the exploitation of natural gas and oil discoveries offshore, is the continued expansion of the non-metallic minerals and the decline of the metallic minerals, especially gold. Significant progress has been made in open cut mining, especially in the extraction of brown coal and construction materials. Exploratory offshore drilling on the Gippsland shelf in Bass Strait has revealed the presence of considerable quantities of oil and natural gas. The major mineral resources of the State are described on pages 366-7 of the *Victorian Year Book* 1967. A further article on the State's minerals appears on pages 1-29 of the *Victorian Year Book* 1970.

Mineral exploration in areas under exploration licences

Mineral exploration consists in the search for, and/or appraisal of, new ore occurrences and known deposits of minerals (including extensions to deposits being worked) by geological, geophysical, geochemical, and other methods (including drilling). Exploration activity takes mainly two forms—exploration carried out in areas where production is current, that is, on a production lease; and exploration in other licensed areas, that is, in areas covered by exploration licences, authorities to enter, and authorities to prospect. Exploration information from licence holders is restricted to twelve minerals. This is collected by the State Mines Department.

In addition to the above two forms of exploration activity there is also general exploration activity such as general surveys, aerial surveys, report writing, map preparation, and other off-site activities not directly attributable to a particular lease or licence area. Information regarding all forms of mineral exploration (other than for petroleum) in Victoria and covering both metallic and non-metallic minerals, fuels, and construction materials is collected by the Bureau of Census and Statistics from every company or organisation engaged in exploration whether under licence, lease, or otherwise. In view of the vast extent of this statistical collection, the scope of the present article has been limited to mineral exploration carried out by exploration licence holders only.

Historically Victoria owes much of its wealth and development to the gold discoveries of the nineteenth century. Gold production quickly reached a peak and thereafter steadily declined until only a few small mines now survive. Significant discoveries of other minerals, notably tin and antimony, were made at different times, but apart from causing short-lived rushes, no major settlements were established as a result of these discoveries. The fact that the most significant discoveries of tin, at Beechworth, and antimony, at Costerfield, were both associated with gold, which was the more valuable mineral, was no doubt partly responsible for this. If these discoveries were made today, the prime recovery products would probably be tin and antimony, with gold the by-product.

Many other mineral discoveries were made including copper, molybdenum, iron, manganese, talc, lead, feldspar, fluorite, and phosphate. Generally, after discovery and working out of the high grade portions of the deposits, pro-

duction ceased within a few years. Exceptions were the black and brown coal deposits. Black coal production in Victoria continued for nearly 90 years. Brown coal has been worked in the La Trobe Valley since 1889 and has been used for power generation and for the manufacture of briquettes and town gas.

Many of these mineral deposits were found by prospectors and were worked under the traditional mining titles of Lease, Mineral Search Licence, or Miner's Right Claim. Since most work was concentrated around known mineral deposits these mining titles were quite adequate for both exploration and mining purposes.

During the years after the Second World War Australia experienced a number of mineral booms, commencing with the uranium boom of the 1950s and culminating in the nickel boom of 1969–70. To a greater or lesser extent these booms have also influenced prospecting activity in Victoria. Although no major mineral discoveries have been made in Victoria during this period, many mining companies and private individuals have carried out exploration programmes.

In the 1950s the type of exploration changed from conventional exploration for extensions of known deposits (although this is continuing) to exploration for completely new deposits in largely unexplored areas. The development and application of exploration techniques, first, in geophysics, and more recently in geochemistry, enabled exploration to be undertaken over very large areas. Airborne magnetic and radiometric methods and stream sediment geochemistry have enabled prospective areas to be delineated within a relatively short time. These areas could then be followed up by more detailed geological, geophysical, and geochemical methods. The traditional mining titles were not satisfactory for this type of exploration and a new exploration title, the exploration licence, was created.

Initially exploration licences in Victoria were issued for copper, lead, gold, tin, and phosphate for an area of up to 1,000 sq miles. An exploration licence gives the holder two important rights: first, he has sole right to leases for the minerals named, and second, subject to the payment of compensation, the right of entry into private land to carry out exploration. The licences are issued for a period of two years and thereafter may be renewed for periods of one year with a reduction in area on each renewal. Since passing of the Act in 1966, the number of minerals has been increased to twelve by the addition of silver, zinc, antimony, nickel, molybdenum, titanium, and zirconium, and the maximum area of a licence has been reduced to 500 sq miles.

To carry out exploration over a large area requires considerable financial resources and technical knowledge. Before a licence is granted the applicant must satisfy the Minister for Mines that he has at his disposal sufficient financial resources and technical ability to carry out an approved exploration programme. In addition, holders of licences are required to submit quarterly reports, including all results of exploration and expenditure incurred in carrying out the work. These reports are required to ensure that work is being carried out on the licence and also contribute greatly to knowledge of the economic and general geology of the State. In recent years considerable exploration in Victoria has been carried out under exploration licences. Areas for which licences have been granted are shown in Fig. 7 on page 365.

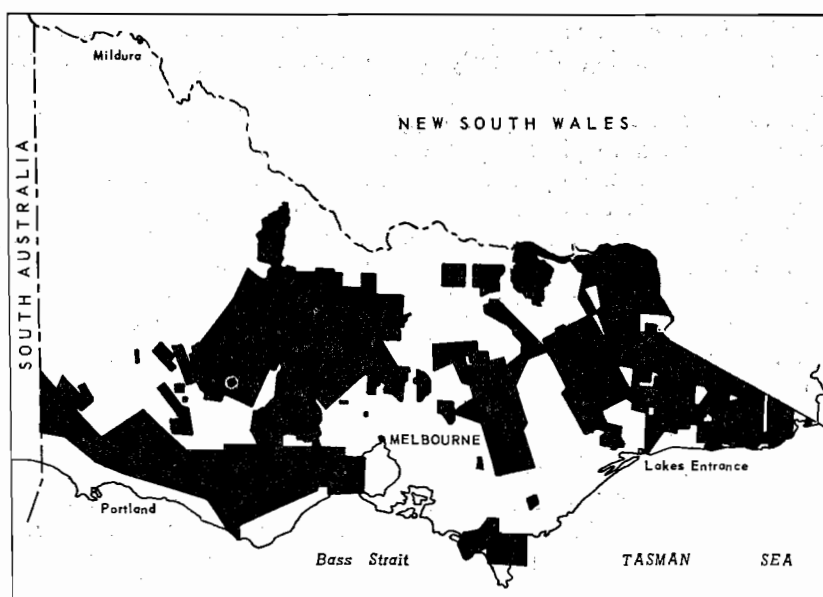


FIGURE 7. Areas which have been held under exploration licence in Victoria. December 1970.

In line with the current thinking of the time, licences have been taken out for particular minerals and it is possible to recognise four distinct phases of activity. Licences taken out in 1966 covered large tracts of potentially auriferous areas in western, east-central, and eastern Victoria. These licences were applied for when a substantial rise in the price of gold was anticipated. When this price rise did not eventuate interest in exploration solely for gold declined and all these early licences have now been abandoned.

Western Mining Corporation Ltd was one of the more active companies in this phase. After high level aeromagnetic studies to determine basement structures which may have influenced locations of ore bodies, the company concentrated its search on the Allendale area near Creswick. This was an area which had proved to be one of the richest deep lead systems in Victoria, although no reef mining had taken place. Induced polarisation surveys yielded several anomalies which were drilled. Target zones were usually at a depth of about 800 ft. No significant reef intersections were made but mineralised zones with low gold values were obtained, indicating that induced polarisation surveys represent a useful exploration tool for gold in this area. Similar methods were used by the company at Clunes where quartz intersections assaying up to 2 dwt of gold per ton were obtained.

During the same period Planet Gold Ltd took up licences at Cassilis in eastern Victoria; around Woods Point, Walhalla, and Gaffneys Creek; around Kyneton and Blackwood; and at Ararat and St Arnaud. Initial work was concentrated at Cassilis where geophysical and geochemical surveys and detailed structural studies of the known reef distribution were followed by diamond drilling. A total of 19 holes with an aggregate footage of 9,385 ft were drilled. Several reef intersections were obtained but sufficient tonnage

and grade of ore could not be proved to warrant mining. Another area to receive attention during this early phase was Bethanga where induced polarisation surveys were used by Mines Exploration Pty Ltd in an attempt to delineate the complex copper-gold-sulphide lodes. Drilling of the anomalies failed to yield any ore intersections.

During the last century the Beechworth Eldorado area was one of Australia's important tin fields. Total production was approximately 9,000 tons of tin concentrates. Most of the tin came from mineral workings along Reedy Creek and tributaries between Beechworth and Eldorado. Recently North Broken Hill Ltd carried out a detailed assessment of the mineral tin deposits of this area. Only minor blocks of ground suitable for dredging were located, the largest having an estimated volume of 17 million cu yards with an average grade of 11c per cu yard, at 1967 prices.

The second phase began in 1966 when there was a considerable increase in exploration for phosphate deposits. The occurrence of typical marine phosphorite in Ordovician sediments near Mansfield and minor occurrences of nodular phosphates in Tertiary sediments of the Otway basin, together with the large consumption of superphosphate and availability of port facilities, all made Victoria an attractive exploration prospect. The companies Planet Mining Company Pty Ltd, Esso Mineral Company of Australia, Continental Oil Company of Australia, and IMC Development Corporation were granted licences. All had licences in the Otway Basin and in addition IMC investigated several Palaeozoic areas.

There is a common association of phosphate with chemically precipitated sediments such as chert, so that geological principles and known stratigraphy of an area could be used to delimit the potential phosphatic areas. The existence of a simple quantitative field test for phosphate enabled testing of outcrops and subsurface samples from bores to be carried out very rapidly. This was an example of exploration ideally suited to exploration licences. Although large areas were initially taken up, they were quickly dropped when nothing was found and few of the licences ran the full two year period. Most of the licence holders carried out drilling programmes and although no phosphate deposits were located a considerable amount of new geological information was obtained.

The third phase, which commenced in 1968, is still continuing and is the least definite of the four. It is characterised by a marked increase in exploration for base metals. The main area of interest is eastern Victoria and exploration has been concentrated in the Buchan area for conformable lead deposits in the Buchan Caves limestone and for porphyry copper deposits with associated molybdenum, in the volcanic and granitic rocks. Although geochemistry had been used by earlier licence holders, the first extensive use of stream sediment sampling in Victoria was in the initial stage of exploration of these licences. As yet no major mineral deposits have been located. During the same period licences were granted for tin exploration in north-eastern Victoria, base metals at Waratah Bay, and antimony at Clonbinane and Costerfield. Exploration has been most successful at Costerfield where a small antimony-gold ore shoot has been located on the previously worked Brunswick Reef. Although the ore shoot only contains an estimated 15,000 tons of ore, its value, in place, is

about \$2.5m. Shaft sinking operations are at present in progress on this reef.

The final phase of exploration commenced late in 1969 and extended into early 1970. It corresponded with a steep rise in the world price of antimony and numerous applications for licences were made for areas in central Victoria. It is noteworthy that, whereas previously most applications were made by recognised mining companies, many of these later applications were by private individuals or companies with little or no previous exploration or mining experience. The myriad of overlapping licence applications, together with the problem of establishing technical competence and financial standing made the administrative screening of these licences extremely difficult. At the end of 1970 little or no exploration had been carried out on these licences. In general, most of the proposed exploration programmes include geological mapping and stream sediment geochemistry as the first stage of exploration.

Details of private exploration expenditure as reported by informants in the Annual Mineral Exploration Census (excluding petroleum exploration) conducted by the Bureau of Census and Statistics is set out in the following table :

VICTORIA—PRIVATE MINERAL EXPLORATION (OTHER THAN
FOR PETROLEUM) EXPENDITURE
(\$'000)

Particulars	Private exploration on—			
	Production leases	Other licensed areas	Other	Total
1965—Drilling	672	29	..	702
Other	133	171	..	304
Total	806	200	..	1,006
1966—Drilling	676	98	..	774
Other	111	346	..	457
Total	787	444	..	1,231
1967—Drilling	548	276	..	824
Other	108	519	..	628
Total	656	796	..	1,452
1968—Drilling	328	435	..	762
Other	179	460	75	714
Total	507	895	75	1,476
1968-69—Drilling	173	372	..	545
Other	436	581	38	1,055
Total	609	953	38	1,600
1969-70—Drilling	191	495	..	686
Other	800	640	227	1,667
Total	991	1,135	227	2,353

Natural gas and crude oil in Victoria, 1960-1971

Natural gas in commercial quantities was first discovered in Victoria early in 1965 and crude oil two years later. During the next four years one gas field, one oil and gas field, and two oil fields were developed. By the end of 1971 about 94 per cent of Victoria's 580,000 gas consumers were using natural gas and Victorian crude oil was satisfying about 62 per cent of Australia's current refinery requirements of 500,000 barrels a day. When the Kingfish B platform in eastern Bass Strait came on stream on 1 November 1971 the Esso and B.H.P. current development programme, commenced in 1966, was completed.

Exploration

Following the completion between 1960 and 1963 by Hematite Petroleum Pty Ltd (a wholly owned subsidiary of The Broken Hill Proprietary Co. Ltd) of geophysical surveys in its petroleum exploration permit areas (now designated Vic/P1 and Vic/P2) in the offshore parts of the Gippsland Basin in eastern Bass Strait, that company entered into a farm-out agreement with Esso Exploration and Production Australia Inc. in April 1964 by which Esso would carry out an exploratory drilling programme in the area.

Natural gas was discovered about 15 miles offshore in February 1965 in a reservoir now known as the Barracouta field. Another gas field, Marlin, was discovered early in 1966. This, together with the Barracouta discovery, confirmed that adequate reserves were available to supply the Victorian market for at least the next thirty years.

In April 1967 oil was discovered in the Kingfish field further out in Bass Strait. Another oil field, Halibut, was discovered nearby later in the same year. Subsequent testing and evaluation, and, in the case of Kingfish, the drilling of two confirmatory step-out wells, proved the existence of two oil fields of high commercial significance, one of which, Kingfish, was declared to be a major field by world standards.

After two confirmatory step-out wells had been drilled on the Snapper and Tuna structures, which had been discovered in 1968, the former was declared in 1970 to be a large commercial gas field and in April 1971 Esso and B.H.P. announced that the Tuna field contained commercial reserves of oil and gas.

From 1965 to 1970, 52 exploratory wells were drilled in Victorian waters in the Gippsland and Otway sedimentary basins. Of these nineteen proved to be commercial discoveries, either as wildcats or confirmatory step-out wells in the six fields named. Over the same period 26 wells were drilled on land in Victoria but all proved to be dry holes. Offshore exploration by Esso/B.H.P. and Shell in the Otway Basin in western Victoria during the years 1967-1970 proved unsuccessful.

In late 1971 N.S.W. Oil and Gas Company NL drilled Flying Fish No. 1 well a few miles offshore in the Gippsland Basin in permit area Vic/P8. On 16 November 1971 Esso and B.H.P. announced that commencing early in 1972, the partnership would undertake a new programme of exploratory drilling, including five wells in the Gippsland Basin.

Reserves

The discoveries made from 1965 to 1970 resulted in the Esso and B.H.P. partnership announcing that initial recoverable reserves in the six fields were estimated to be 9.3 trillion cubic feet of natural gas and 1,591 barrels of crude oil. In addition there is an estimated 0.2 trillion cubic feet of gas in the Golden Beach field discovered by B.O.C. Australia Ltd in an offshore tenement shared with the original permit holder Woodside Oil NL and a number of other companies.

GIPPSLAND FIELDS—INITIAL RECOVERABLE RESERVES OF GAS AND OIL

Field	Natural gas	Crude oil	Years field discovered and proved
Barracouta	trillion cubic feet 1.8	million barrels 7	1965 (gas) 1968 (oil)
Marlin	3.5	..	1966
Halibut	0.3	440	1967
	{ dissolved gas in crude		
Kingfish	..	1,060	1967-68
Snapper	3.2	..	1968-69
Tuna	0.5	84	1968-70
Golden Beach	0.2	..	1967
Total	9.5	1,591	..

Sources : Oil and Gas Division, B.H.P., Woodside Oil N.L. (Golden Beach).

*Development of the Gippsland gas and oil fields**Natural gas*

Anticipating that adequate markets for natural gas would be secured, the Esso/B.H.P. partnership commenced the development of the Barracouta and Marlin gas fields early in 1967. The jackets and decks for the necessary development platforms were fabricated at Barry Beach in Corner Inlet, about 120 miles south-east of Melbourne, where a large marine terminal was established between 1966 and 1968 to fabricate the offshore platforms, to coat and store pipe for the necessary undersea and onshore pipeline, and to service exploration rigs, and later, the production platforms.

The Barracouta platform was towed out into the waters of eastern Bass Strait in December 1967 and set in position about 15 miles offshore in 150 ft of water. Within 15 months the planned ten development wells had been drilled (including a deep exploratory probe which located a reservoir containing 7 million barrels of high grade crude oil), production equipment installed, and a 30 mile, 18 inch undersea and offshore pipeline laid. On 7 March 1969 natural gas commenced flowing to the treatment facilities at the Gippsland Gas Processing and Crude Oil Stabilisation Plant then in the course of erection at Longford, a few miles south of Sale, in east Gippsland. The second gas production platform, Marlin, was erected during 1969 about 30 miles offshore in 195 ft of water and after four development wells had been completed in 1969, gas commenced flowing ashore to Longford on 21 January 1970 through a 67 mile, 20 inch undersea and onshore pipeline. Development drilling from this platform was temporarily suspended

in December 1968 following a serious blow-out and is scheduled to be resumed during 1972. The bringing on stream of two separate gas fields with separate pipelines to the treatment plant ensures security of gas supply to the Victorian market and complied with a condition of the contract between Esso/B.H.P. and the gas utilities.

Between 1968 and 1970 Esso and B.H.P. erected combined gas treatment and crude oil stabilisation facilities at Longford at a cost of about \$51m. At this plant, varying percentages of the heavier hydrocarbons—ethane, propane, butane, and pentanes—are removed from the field gas to yield a dry, pipeline quality gas suitable for marketing to homes and industry. The plant also treats the crude oil from the oil fields by removing the dissolved gases for maximum safety of transmission and storage of the oil and passing them to the gas treatment facilities. The dry gas is piped to Dandenong through the trunkline built by the Victorian Pipelines Commission in 1968 at a cost of about \$20m. This pipeline, which commenced operating on 16 March 1969, was taken over by the Gas and Fuel Corporation of Victoria on 1 July 1971, when the Commission was abolished by Act of Parliament.

The ethane, propane, and butane remaining after the treatment of the gases received from the Barracouta and Marlin fields and those removed from the crude oil are conveyed as gas liquids through a 118 mile, 10 inch pipeline built by Esso and B.H.P. during 1968 and 1969, to a fractionation plant at Long Island Point near Hastings about 40 miles south-east of Melbourne. Both the initial and first expansion stages of the construction of processing facilities which will eventually produce about a million tons a year of marketable propane and butane and large volumes of ethane gas, have been completed at this plant, the erection of which commenced in 1968. Six refrigerated storage tanks, each with a capacity of 135,000 barrels of propane and butane, have been erected and a seventh tank, of 270,000 barrel capacity, is currently being built to store butane. The initial stage of the plant was commissioned in April 1970 and the first consignment of propane and butane was loaded into a refrigerated carrier at the adjacent liquids jetty and shipped to markets in Japan early in July 1970.

Crude oil

After construction of the platforms for the development of the Barracouta and Marlin gas fields had been completed in 1968, Esso and B.H.P. commenced work at Barry Beach Marine Terminal on fabricating the jackets and decks for the platforms necessary to develop the Halibut and Kingfish oil fields. The first of these, Halibut, was erected early in 1969 in 238 ft of water about 40 miles offshore. Development drilling from the 24 well capacity platform was completed early in 1970 and on 13 March crude oil commenced flowing to the treatment facilities at Longford through an 82 mile, 24 and 26 inch pipeline, 47 miles of which was laid on the sea floor.

The two 21 well Kingfish platforms were erected in waters 255 ft deep about 48 miles offshore during 1969 and 1970. Development drilling from the Kingfish A platform commenced on 31 March 1970 and was completed early in 1971. On 22 April 1971 the Kingfish field came on stream and crude oil commenced flowing through a 2.3 mile, 16 inch pipeline to the Kingfish B platform where it was fed into the Halibut to Longford oil

pipeline. Development drilling from the sister Kingfish B platform commenced on 22 October 1970 and was completed in October 1971. This platform came on stream on 1 November 1971. A summary of wells drilled from the five development oil and gas platforms is given in the following table :

GIPPSLAND BASIN—OFFSHORE PRODUCTION WELLS DRILLED FROM
FIXED PLATFORMS

Platform	Well capacity of platform	Date drilling commenced	Number of wells drilled	Date production commenced	Number of producing wells
Barracouta	10	8.3.68	10	7.3.69 (gas) 8.10.69 (oil)	4 6
Marlin	24	2.8.68	(a) 6	21.1.70 (gas)	4
Halibut	24	22.3.69	(b) 21	13.3.70 (oil)	19
Kingfish A	21	31.3.70	21	22.4.71 (oil)	21
Kingfish B	21	22.10.70	21	1.11.71 (oil)	21
Total	100	..	79	..	75

Source : Esso Australia Ltd, November 1971.

(a) Includes two wells plugged and abandoned (A-2 and A-7). Drilling ceased after blowout on A-7 well on 2 December 1968.

(b) Includes one well abandoned and one well suspended. Total number to be drilled in current programme.

During 1971 the 26 inch onshore section of the Halibut-Longford oil pipeline was looped by the laying of a 17.8 mile, 30 inch pipeline to improve the throughput of crude from the Kingfish field. On 26 April 1971 the production of crude oil from the Gippsland fields at the platforms exceeded 300,000 barrels a day and in November 1971 reached 350,000 barrels a day. This results in approximately 315,000 barrels a day of stabilised crude or about 62 per cent of Australia's refinery requirements.

After treatment in the stabilisation facilities at the Gippsland Gas Processing and Crude Oil Stabilisation Plant at Longford to remove the dissolved gases to ensure safe transportation and handling, the crude oil is conveyed through a 117 mile, 28 inch pipeline built by Esso and B.H.P. in 1969, to the eight 268,000 barrel capacity storage tanks and the shipping terminal located at Long Island Point. From there it is conveyed by tankers to refineries in Victoria, New South Wales, South Australia, Queensland, and overseas ; and by a 7 mile, 42 inch pipeline to the nearby BP refinery at Crib Point. Some of the crude conveyed through this line is also shipped from the Crib Point liquids jetty which services the BP refinery following the installation of additional facilities in 1970. The bulk of the crude oil and all the propane and butane are, however, loaded into tankers and carriers, respectively, at the Long Island Point liquids jetty built by Esso for the Victorian Government during 1968 and 1969 at a cost of \$6m.

The production of natural gas, crude oil, propane, butane, and ethane during the years 1968-69 and 1969-70 is shown in the table on page 376.

Purchase and distribution of natural gas by Victorian utilities

On 16 March 1967 the four gas utilities then operating in Victoria as the buyers, and Esso and B.H.P. as the sellers, signed a Letter of Intent for

the supply of natural gas over a 20 year contract period at prices ranging between a maximum of 3.2 cents a therm and a minimum of 2.58 cents a therm, depending on quantities taken and to remain firm over that period. This Letter of Intent was later confirmed by contracts between the buyers and the sellers.

Natural gas commenced flowing from the Esso and B.H.P. treatment plant at Longford on 16 March 1969 and was turned in from the Victorian Pipelines Commission's station at Dandenong to the Gas and Fuel Corporation's Melbourne distribution system on 31 March 1969. On 14 April 1969 Victoria's first consumer was connected. The Corporation and the other Melbourne gas utility, The Colonial Gas Association Ltd, had commenced planning in 1966 for the introduction of natural gas. Old pipelines were checked and up-graded and a number of new ones laid to form a fully integrated network. The principal distribution pipelines laid were the Corporation's 51 mile, 18 inch transmission main around the eastern and northern suburbs from Dandenong to West Melbourne between 1966 and the end of 1969, and the 21.6 mile, 30 inch transmission line from Dandenong to West Melbourne in 1969 and early 1970, thus ringing the city with a new 73 mile integrated pipeline system. Costing about \$11m, the complete line became fully operational in May 1970.

In addition to this pipeline, the Corporation and The Colonial Gas Association laid a number of high pressure transmission pipelines in various suburbs around Melbourne. The Corporation also laid pipelines to supply Sale, Maffra, Edithvale, Mornington, Broadmeadows, and Craigieburn.

The combustion characteristics of natural gas vary considerably from those of manufactured gas and it therefore became necessary to modify all gas burning appliances before the new fuel could be used. Both companies embarked on programmes to convert all appliances at no cost to the consumer. The Colonial Gas Association, which commenced supplying natural gas to its customers in May 1969, completed the conversion of the 170,400 appliances owned by its 78,653 customers in its two franchise areas in Melbourne in March 1970 at a cost of about \$5.3m. On 23 December 1970 the Gas and Fuel Corporation completed, at a cost of about \$31m, the conversion of the 1.1 million appliances owned by its 446,000 customers in its Melbourne and Gippsland franchise areas. Melbourne thus became the first capital city in Australia to be wholly converted to natural gas.

Natural gas was supplied to the Gippsland towns of Warragul, Trafalgar, Morwell, Traralgon, and Sale in November and December 1969 through pipelines laid between 1955 and 1970 and supply commenced to Geelong, 45 miles south-west of Melbourne, on 15 March 1971. The Victorian Pipelines Commission, which had been established by Act of Parliament late in 1966 to build natural gas trunklines in Victoria, laid a 33 mile, 14 and 16 inch pipeline from Brooklyn to Corio late in 1970 and early in 1971 to supply Geelong, at a cost of approximately \$4m. This line is now owned and operated by the Gas and Fuel Corporation following the abolition of the Victorian Pipelines Commission on 1 July 1971 and the transfer of its assets and function to the Corporation. The Geelong Gas Company in 1970 laid a system of pipelines from Corio to the various suburbs of Geelong which it supplies with gas.

The Gas and Fuel Corporation, which over a number of years since its inception in 1951 had purchased a number of gas utilities in various parts

of Victoria, obtained from The Gas Supply Co. Ltd its undertaking at Sale in 1969 and the balance of that company's assets in Victoria in 1970. The latter comprised gas-making, distribution, and marketing facilities in ten country towns including Victoria's third largest city, Ballarat. In June 1971 the Corporation purchased over 90 per cent of the shares in The Geelong Gas Company and assumed ownership of the company. At present the company continues to operate under its own name and the original Act of Parliament by which it was established.

When the conversion of The Geelong Gas Company's 23,000 customers was completed in August 1971, about 95 per cent of Victoria's 576,000 gas users were burning natural gas. The remaining 30,000 customers, all located in country areas, are using reformed or tempered liquefied petroleum gas. This number will be further reduced when natural gas is supplied by the Gas and Fuel Corporation to Ballarat and Bendigo in 1973 following the laying of a 122 mile high pressure pipeline system in 1972 and 1973 linking Melbourne to those cities.

Among the most important items of gas legislation passed during 1970 was the *Gas Franchises Act* 1970. This Act defines the geographical boundaries of the franchise areas of the Gas and Fuel Corporation of Victoria and The Colonial Gas Association Ltd within the State of Victoria and establishes the rights, subject to certain conditions and exemptions, of each of the two organisations to supply gas within those areas.

Since natural gas became available in April 1969 the sale of gas by the Victorian utilities has more than doubled. Between January and the end of October 1971, the first year natural gas had been in use in Melbourne and Gippsland, and including Geelong from March; consumption by all the gas utilities has varied from a daily average of 42.21 million cubic feet during January to a seasonal peak daily average of 97.38 million cubic feet during July and August and a daily average of 81.39 million cubic feet in October.

On 19 January 1971 the Gas and Fuel Corporation and Australian Paper Manufacturers Ltd announced that agreement had been reached for the Corporation to commence supplying natural gas to A.P.M.'s plants early in 1972. The contract is for around 25 million therms a year, rising over several years to almost double that volume. The gas will be used at both the Fairfield paper and paper board mill and at the Maryvale pulp and paper mill near Morwell, in Gippsland. Since then the laying of two pipelines to convey the gas to the mills concerned has been completed and supply is expected to commence early in 1972.

The largest single contract for the sale of natural gas occurred later in the year following an announcement on 8 June 1971 that 1.2 trillion cubic feet of natural gas from Victoria's Gippsland fields reserves had been allocated to the State Electricity Commission of Victoria for use as a fuel in a new peak and intermediate load power station to be built at Newport, Melbourne. It is expected that the first of the two 500 MW generators will be commissioned in 1976 and the second one in 1978.

Distribution of crude oil and L.P.G.

The first load of Gippsland oil, comprising 105,000 barrels of Barracouta crude, left the Long Island Point liquids jetty on 24 March 1970 in the tanker *Hemiglypta* for the P.R.A. refinery at Port Stanvac, South Australia.

The liquids jetty, built by Esso for the Victorian Public Works Department during 1968 and 1969 at a cost of \$6m, is 2,200 ft long, has a 356 ft berthing head, and is served by a channel and turning basin dredged to a depth of 47 ft. It has the capacity to load crude oil into tankers up to 100,000 tons deadweight and propane and butane (L.P.G.) into large refrigerated carriers. In Victoria, the first deliveries of Gippsland crude were made to the P.R.A. refinery at Altona on 27 March 1970, to the BP refinery at Crib Point on 3 April 1970, and to the Shell refinery at Corio on 7 April 1970.

In addition crude oil is conveyed to the BP refinery at Crib Point through Esso and B.H.P.'s 7.2 mile, 42 inch distribution pipeline laid in early 1970 for the dual purpose of supplying the refinery and connecting the Long Island Point tank farm to the Crib Point liquids jetty to increase tanker loading capacity and provide alternative shipping facilities. The first load of Gippsland crude was shipped from this jetty on 5 July 1970.

Since the first Gippsland oil field, Barracouta, came on stream in October 1969, it has, together with the large Halibut and Kingfish fields, produced a total at the platforms of 134.6 million barrels of oil to the end of October 1971. This volume is reduced during the stabilisation process by about 9 per cent and 124.4 million barrels of crude have been taken by pipeline to the Long Island Point Tank Farm for distribution to refineries.

Government approval was given to W.A.G. Pipeline Pty Ltd in April 1971 to lay a crude oil distribution line 84.4 miles long from Long Island Point around Port Phillip Bay to supply Victoria's two other refineries—P.R.A. at Altona and Shell at Corio, north of Geelong. Laying of the pipeline commenced late in September 1971 and is scheduled to be completed about the middle of 1972 at a cost of about \$13 to \$14m. The diameter of the 51 mile section to Altona is 24 inches and the balance of the line to Corio is 16 inches.

The first load of propane and butane, for which markets in Japan had been arranged independently by Esso and B.H.P., left Long Island Point in the refrigerated carrier *Bridgestone Maru 1* on 4 July 1970. To the end of October 1971, 598,275 metric tons have been shipped with carriers being loaded at the rate of one every 2 to 3 weeks. At the Altona Petrochemical Co. Ltd, a member company of the Altona petrochemical complex, an ethane cracker to produce ethylene basestock has been built at a cost of \$18m and approval has been given by the Government to Esso and B.H.P. to lay a 49 mile, 10 inch pipeline from the Long Island Point Fractionation Plant to convey ethane gas to Altona. It is expected that laying of this line will commence early in 1972.

Refining and marketing

Large scale refining of crude oil in Victoria commenced in 1954 when the Vacuum Oil Company, later to become Mobil Oil Australia Ltd, extensively enlarged a small refinery at Altona in 1954 at a cost of \$40m. This refinery is now operated by Petroleum Refineries (Aust.) Pty Ltd, which is owned 65 per cent by Mobil and 35 per cent by Esso. Also in 1954, Shell commenced production at its newly built refinery at Corio near Geelong

and laid Victoria's first long distance petroleum products pipeline to Shell commenced production at its newly built refinery at Corio near Geelong and laid Victoria's first long distance petroleum products pipeline to Melbourne. The refinery cost \$60m and has a capacity of 2.4 million tons a year. A second pipeline to convey fuel and furnace oils was laid to Melbourne by Shell during the early 1960s.

The expansion of the automobile industry in the 1960s, coupled with the demand for furnace and fuel oil in industry and for transport and shipping of light oils for the manufacture of petrochemicals, resulted not only in the establishment by BP Australia Ltd of Victoria's third refinery at Crib Point costing \$40m and having a capacity of 2.4 million tons a year, but also in expanding the two established refineries—P.R.A. at Altona and Shell at Corio. In 1966 BP Australia laid a 24 mile products pipeline from Crib Point to its distribution terminal at Dandenong.

Until 1969 the output of all Australian refineries had been designed for the processing of heavy crude oils imported from the Middle East and Indonesia and blended with small amounts of light indigenous Australian crudes from Moonie and Barrow Island. The Gippsland fields, however, produce light crudes with a high wax and low sulphur content, containing mainly fractions suitable for the production of petrol, jet fuel, and diesel oils. The average yield of Gippsland crudes is naphtha 35 per cent, kerosene 10 per cent, diesel oil 22 per cent, light ends 5 per cent, and residuals 28 per cent. Petrol is derived from the naphtha and the residuals; and jet fuel and lubricating oils can be produced. Therefore, some modifications to Australian refineries were required to process these different types of crude.

Between 1967 and 1970 the P.R.A. and Shell refineries in Victoria undertook an expansion programme to cope with increasing market demands and at the same time converted existing equipment and installed new plant to enable Gippsland crude to be processed efficiently. First, the Shell refinery undertook a \$10m expansion programme in 1967 and 1968 and followed this with the installation in 1970 of a new \$5m gasoline alkylation plant. The P.R.A. refinery at Altona completed late in 1970, at a cost of \$26m, a conversion and expansion programme comprising a new crude processing unit, a new naphtha reformer, a new naphtha treater, and various other work upgrading existing refinery facilities. The BP refinery installed facilities costing about \$1m to improve the handling of the Gippsland crudes and a further \$1m was spent on facilities for the shipping of Gippsland crude from the adjacent liquids jetty.

When the work was completed the Shell refinery had increased its processing capacity to 118,000 barrels a stream day (BSD). Production at the P.R.A. refinery can range from 85,000 to 95,000 BSD according to the feedstocks used, while the BP refinery at Crib Point remains unchanged at 50,000 BSD. The total cost of the various expansion and conversion programmes amounted to about \$50m and increased Victoria's refinery capacity to about 263,000 BSD or 38 per cent of the Australian total.

Petroleum products are distributed throughout Victoria through a number of industry terminals and about 5,200 retail outlets operated by nine major oil companies. The principal products marketed in Victoria's marketing area (which includes part of southern New South Wales) during 1970-71 were :

	'000 gallons
Motor spirit	658,685
Automotive distillate	144,086
Industrial diesel fuel	100,125
Furnace fuel	377,652
Heating oil	65,448
Aviation turbine fuel	47,749
Aviation gas	3,095
Lighting kerosene	13,096
Power kerosene	4,053

These quantities total 1,413,989,000 gallons or 25.5 per cent of the Australian total of the main petroleum fuels.

The following table sets out details of oil and gas production for the years ended June 1969 and 1970 :

**VICTORIA—OIL AND GAS PRODUCTION
FROM GIPPSLAND FIELDS**

Product		1968-69	1969-70
Crude oil	'000 barrels	..	13,474
Natural gas (a)	MMSCF (b)	738	9,668
Commercial ethane		..	17
Commercial butane	'000" barrels	..	98
Commercial propane	"	..	137

(a) Includes commercial gas and gas for field usage.

(b) Million standard cubic feet.

Mineral production

The mineral production of the State, as recorded by the Mines Department, from lands occupied under the Mines Act (excluding stone produced in quarries and salt) for the years ended December 1967, 1968, and June 1969, is as follows :

VICTORIA—MINERAL PRODUCTION

Minerals	1967		1968		1968-69	
	Quantity	Value	Quantity	Value	Quantity	Value
	fine oz	\$'000	fine oz	\$'000	fine oz	\$'000
Precious metals—						
Gold	10,996	(a) 468	11,069	(a) 431	10,163	368
Silver	99	(b)	260	(b)	165	(b)
Other minerals—	ton		ton		ton	
Bauxite	2,020	11	..	..	4,016	20
Tin concentrates	47	90	92	162	61	81
Coal, black	32,066	251	26,314	209	13,102	105
Coal, brown	23,383,607	20,686	22,970,653	21,555	23,128,491	20,880
Copper concentrate	74	4	162	6	865	41
Fireclay	34,581	57	18,897	24	21,209	28
Gypsum	224,065	355	77,472	167	64,252	130
Kaolin and other clays	1,808,598	3,127	2,008,000	3,342	1,868,606	1,780
Limestone	1,992,158	2,671	1,819,517	2,379	1,871,754	2,466
Iron ore	480	6	174	1	559	15

(a) Includes gold subsidy \$125,332 for 1967, \$87,824 for 1968, and \$32,867 for 1968-69.

(b) Value of silver production in Victoria \$71 in 1967, \$500 in 1968, and \$154 in 1968-69.

The following table shows the average annual production and value of black and brown coal for each of the five year periods from 1926 to 1960 and the production and value for each of the years 1961 to 1968-69 :

VICTORIA—COAL PRODUCTION AND VALUE (a)

Period	Black coal		Brown coal	
	Production	Value	Production	Value
	tons	\$'000	tons	\$'000
1926-1930	668,177	1,786	1,515,592	386
1931-1935	472,030	888	2,445,215	512
1936-1940	324,903	568	3,608,751	712
1941-1945	286,277	818	5,010,555	1,052
1946-1950	156,290	722	6,648,430	2,404
1951-1955	143,535	1,590	8,728,116	7,186
1956-1960	100,893	1,050	12,193,625	11,302
1961	66,363	718	16,279,168	15,444
1962	56,721	632	17,137,438	15,682
1963	50,481	588	18,456,445	16,158
1964	47,058	544	19,034,792	17,304
1965	42,247	515	20,658,856	18,436
1966	35,519	497	21,782,977	20,064
1967	32,066	251	23,383,607	20,686
1968	26,314	209	22,970,653	21,555
1968-69	13,102	105	23,128,491	20,880

(a) Value of output at the mine.

Further references, 1965-1971; Mining in Victoria, 1964; Underground water, 1964; Groundwater in Victoria, 1969; Victorian clays, 1970; Brown coal, 1971; Minerals in Victoria, 1970; History of the Mines Department, 1970; Natural gas and crude oil development, 1971.

Quarrying

Information in the following table has been obtained from "regular" quarries which are known to have a fixed plant and which are in permanent production, and from mines producing construction materials as by-products of their main activity :

VICTORIA—CONSTRUCTION MATERIALS PRODUCTION

Year	Sand	River gravel and gravel boulders	Dimension stone	Crushed and broken stone	Other quarry products
	'000 cu yd		ton	'000 cu yd	
1965	2,956	664	14,347	9,827	728
1966	3,148	492	9,546	11,198	754
1967	3,009	596	10,530	12,869	602
1968	3,687	570	7,149	12,255	1,022
	'000 ton		ton	'000 ton	
1968-69p	4,730	594	9,054	14,432	1,042

p: Preliminary.

In addition to the production set out in the preceding table, a considerable quantity of material is won by contractors operating shallow pits for or on behalf of local government authorities. Some of these work mine tailings. This itinerant activity was first covered by statistical returns for 1961. However, the statistics are available only from 1962. Reported production data for the years 1965 to 1968-69 are :

VICTORIA—CONSTRUCTION MATERIALS: ITINERANT ACTIVITIES

Type of material	1965	1966	1967	1968	1968-69
		'000 cu yd			'000 ton
Sand	244	266	422	384	538
Gravel and gravel boulders	2,072	1,994	2,156	1,856	2,150
Crushed and broken stone	2,123	1,537	678	883	1,142
Other quarry products	1,040	818	875	435	821

Further references, 1966-1971

VALUE OF PRODUCTION

The value of production as estimated in the following tables is based to a large extent on returns received annually from individual producers throughout the State. As a measure of total production it is incomplete, as it does not include the building and construction industry. It also omits factories employing less than four hands (unless power-driven machinery is used) and excludes agriculturists with holdings of less than one acre.

A detailed account of the period covered for individual rural industries is given on page 305. Except in the case of mining and quarrying, statistics for the non-rural industries refer to the year ended 30 June. Statistics for mining and quarrying relate to the year ended 31 December of the first year shown.

Gross value

Gross value is defined as the value placed on recorded production at the wholesale price realised in the principal market. In cases where primary products are absorbed locally, or where they become raw material for secondary industry, these points are presumed to be the principal markets. Care is taken to prevent, as far as possible, all overlapping or double counting. The primary value of dairy production, in accordance with the above definition, is the price paid at the factory for milk or cream sold by the farmer; the value added by the process of manufacturing into butter, etc., is included in manufacturing production.

VICTORIA—GROSS VALUE OF PRIMARY PRODUCTION EXCLUDING MINING (\$'000)

Industry	1965-66	1966-67	1967-68	1968-69	1969-70
Agriculture	262,852	325,461	221,960	331,715	319,698
Pastoral	413,558	376,196	355,318	345,275	385,025
Dairying (a)	190,141	206,638	181,541	202,245	225,142
Poultry and bees	51,975	57,658	51,316	47,377	49,325
Trapping	5,785	4,244	3,621	3,623	3,078
Forestry	29,691	29,675	27,845	28,517	30,010
Fisheries	4,403	4,980	5,725	5,928	5,839
Total gross value	958,405	1,004,852	847,326	964,681	1,018,117

(a) Includes subsidy: 1965-66 \$14,569,000, 1966-67 \$14,575,000, 1967-68 \$14,913,000, 1968-69 \$16,667,000, 1969-70 \$16,597,000.

Local value

The gross value of production, less costs of marketing (freight, cartage, brokerage, commission, insurance, and containers), represents the gross production valued at the place of production, that is, local value, details of which are shown in the following table :

VICTORIA—LOCAL VALUE OF PRIMARY PRODUCTION
EXCLUDING MINING
(\$'000)

Produce	1965-66	1966-67	1967-68	1968-69	1969-70
Agriculture—					
Barley	2,938	6,174	2,606	6,470	8,982
Maize	99	111	39	80	99
Oats	12,555	14,498	6,229	10,560	8,189
Wheat	75,456	87,279	36,735	95,832	87,223
Onions	1,507	1,188	1,266	649	731
Potatoes	7,763	12,649	16,132	6,891	13,680
Other vegetables for human consumption	19,425	21,862	20,713	19,668	20,987
Hay and straw	39,350	73,108	48,307	71,956	33,841
Fruit	27,654	24,302	26,940	23,469	37,077
Vineyards	17,670	18,688	19,496	16,160	21,344
Other crops	21,295	22,095	17,527	24,688	27,781
Total	225,713	281,954	195,992	276,423	259,934
Pastoral—					
Wool	168,613	167,123	124,143	145,557	143,040
Sheep, slaughtered	57,113	57,081	71,981	56,192	67,430
Cattle, slaughtered	145,403	119,187	128,648	118,882	146,015
Total	371,130	343,391	324,772	320,631	356,485
Dairying—					
Whole milk used for—					
Butter	87,544	96,922	72,345	95,110	109,859
Cheese	11,201	14,792	15,756	13,727	11,991
Condensing, concentrating, etc.	16,365	16,552	14,027	14,409	12,306
Human consumption and other purposes	35,410	37,731	39,925	37,844	41,455
Subsidy paid on wholemilk for butter and cheese	14,569	14,575	14,913	16,667	16,597
Pigs, slaughtered	17,513	17,540	16,905	16,392	19,372
Total	182,601	198,111	173,871	194,148	211,580
Poultry and bees—					
Eggs	33,914	35,173	33,535	31,163	33,395
Poultry	11,546	15,423	11,995	11,731	11,830
Honey and beeswax	989	758	782	396	821
Total	46,449	51,354	46,311	43,291	46,046
Trapping, etc.—					
Rabbits and hares	4,826	3,470	3,051	2,875	2,371
Rabbit and hare skins, etc.	595	506	359	524	513
Total	5,421	3,976	3,409	3,400	2,884
Forestry—					
Sawmills	22,494	23,798	23,235	25,865	26,137
Hewn timber	2,928	2,516	2,477	2,231	2,076
Firewood	3,278	2,554	1,586	1,371	1,348
Bark for tanning	108	89	80	63	59
Other	62	77	70	48	52
Total	28,870	29,036	27,448	29,577	29,672

VICTORIA—LOCAL VALUE OF PRIMARY PRODUCTION EXCLUDING MINING—*continued*
(\$'000)

Produce	1965-66	1966-67	1967-68	1968-69	1969-70
Fisheries—					
Fish	1,872	1,643	1,933	2,269	2,619
Crayfish	1,040	909	1,012	1,436	1,481
Scallops	789	1,344	1,310	875	196
Other	96	411	898	697	639
Total	3,797	4,307	5,153	5,277	4,935
Total local value	863,980	912,128	776,957	872,747	911,537

(a) More than nil, but less than \$500.

Net value of production

Net value of production is computed by subtracting from local value the cost of materials used in the process of production. These materials include stock feed, seed, manures, power, petrol, kerosene, other oils, dips, sprays, and other costs. No deductions have been made for depreciation or certain maintenance costs. The net value of production is the only satisfactory measure to use when comparing or combining the value of primary industries with those of other industries. Details for primary industries excluding mining are shown in the table below :

VICTORIA—NET VALUE OF PRIMARY PRODUCTION EXCLUDING MINING
(\$'000)

Division of industry	1965-66	1966-67	1967-68	1968-69	1969-70
Rural—					
Agriculture	202,674	255,016	169,501	247,194	216,421
Pastoral	346,230	315,142	254,187	262,707	303,234
Dairying	135,601	145,567	140,097	166,117	185,090
Poultry	28,192	32,464	27,705	25,675	25,409
Bee farming	989	758	782	396	821
Total rural	713,686	748,947	592,272	702,089	730,975
Forestry, fishing, trapping	38,088	37,319	36,179	38,242	37,492
Total net value	751,774	786,266	628,451	740,331	768,467

MANUFACTURING INDUSTRY

NATURAL RESOURCES AND LOCATION

Natural resources

Victoria's temperate climate and its rainfall, soil, and water resources have been used to develop the production of wool, grains, fruit, dairy products, and timber. On these the State's early secondary industries were based. There are extensive fuel resources of brown coal in the La Trobe Valley. Of special importance to the industries of the State are the oil and natural gas fields in Bass Strait, the first of which was discovered in February 1965. In March 1969 natural gas for commercial use flowed from the Barracouta field and on 14 April 1969 natural gas was made available to the first domestic consumer in Victoria at Carrum. This was supplemented in 1970 from gas from the Marlin field. Oil in commercial quantities became available from the Barracouta field in October 1969 and from the Halibut field in March 1970. Reserves of gas and oil are known to be present in the Snapper and Kingfish fields, respectively.

The La Trobe Valley brown coal deposits, and to a much lesser degree those of south Gippsland and a number of small basins west of Melbourne, are now the most important mineral deposits in Victoria. The open cuts of the Yallourn-Morwell area produce about 21 million tons of brown coal annually for briquette making and electricity generation. Small quantities of black coal (35,000 tons annually) were mined in south-western Gippsland until the end of 1968.

Clay deposits for brick, tile, and pottery industries are worked east of Melbourne and near Ballarat, Bendigo, Colac, Shepparton, and Wangaratta. Sand, for the concrete and glass industries and for use in foundries, is obtained in the Port Phillip and west Gippsland areas. Stone and gravel quarries are worked in many parts of the State. The main market for quarry products is the metropolitan area and as these products are bulky and expensive to transport, most quarrying is located within a 50 mile radius of the capital. Local limestone deposits attracted the establishment of cement works at Geelong and Traralgon while the Lilydale limestones are used in the manufacture of agricultural lime.

Other mineral resources of Victoria include gold mining in the Castlemaine district; salt production from deposits of the Mallee and Wimmera lakes and the western shores of Port Phillip; gypsum in the north-western Mallee; and bauxite deposits in south Gippsland.

The forests of Gippsland and the Central Highlands form the basis of important forestry activities, especially in Gippsland where paper is produced at Maryvale. Victorian forests provide approximately one quarter of Australia's timber.

Power supplies are essential for industrial development. The lack of black coal once necessitated significant imports from New South Wales. During 1970-71 the State Electricity Commission generated 91.6 per cent of Victoria's electricity, mostly from steam plants fired by briquettes or brown coal in the La Trobe Valley ; the balance is brought in, or produced in factories. Electricity is now transmitted throughout the State by the high voltage grid network shown on the map on page 399.

Recent discoveries of large offshore reserves of oil and natural gas in the Gippsland Basin (the potential of which has not yet been fully determined) make Victoria's power and chemical outlook promising.

Other sources of power for industry are gas, produced in Melbourne and principal country centres, and brought by pipeline from Morwell to Melbourne, and oil and liquid petroleum gas from the refineries at Altona, Geelong, and Crib Point.

Water, needed in large quantities for industry, is available throughout the State from the dams and storages in the catchment areas of the main rivers (see map on page 478 of *Victorian Year Book* 1966). In most years Melbourne is well supplied with water from the storages to the north and north-east of the city in the Plenty, Upper Yarra, Maroondah, and O'Shannassy river catchments. However, severe water restrictions were imposed during the 1967-68 summer due to State-wide drought conditions. To meet future requirements, construction works for extending the water supply are in progress. (See pages 254-5.)

Location

The early concentration of industry in Melbourne has continued although power supplies now come largely from the La Trobe Valley. Of Victoria's 18,030 factories in 1967-68, 72.7 per cent were located in the Melbourne Statistical Division, which also had 83.0 per cent of the State's factory workers. Melbourne's factories contributed 80.6 per cent of the value added in manufacture. This concentration of manufacturing in the metropolitan area is partly due to the fact that Melbourne is Victoria's main port and the hub of the transport network. It is also the largest market in the State and the centre of commerce and finance ; it has a large labour force; and it is the administrative and educational centre of Victoria.

Many types of secondary industry are well represented in Melbourne. There are particularly high concentrations of the State's chemical, metal processing, textile, paper, furniture, food, and building materials industries in the capital. In terms of numbers employed, the engineering and metal processing industry is the major industry of Melbourne. Initially, industries developed in the inner areas of Port Melbourne, South Melbourne, Richmond, Collingwood, Spotswood, Fitzroy, and Footscray. The more recently established industries such as the motor vehicle, chemical, rubber, and refining industries, have taken up land in the outer industrial areas of

Altona, Broadmeadows, Moorabbin, Oakleigh, and Dandenong, where considerable areas of flat land are available for future expansion.

Outside the metropolitan area, Geelong is the most important industrial centre, with port facilities, close proximity to the Melbourne market, and rich surrounding rural areas. Industries established in the area include petroleum refining, and the manufacture of agricultural machinery, motor vehicles, aluminium ingots and extruded products, textiles, chemical fertilisers, clothing, carpets, foodstuffs, cement, fertilisers, sporting ammunition, and grain storage.

The other country urban areas in which more than 1,000 persons are employed in factories (ranked in order of the number of persons employed in factories) are the La Trobe Valley, Ballarat Urban Area, Bendigo Urban Area, Warrnambool City, Wangaratta City, Shepparton City, Maryborough City, and Castlemaine City. Apart from the La Trobe Valley, which is primarily engaged in power generation and ancillary activities, the factory population elsewhere is engaged in the production of food, textiles and clothing from locally produced raw materials, in engineering plants, which sometimes had their origin in the gold mining era of the nineteenth century, and more recently in decentralised plants with defence significance.

MANUFACTURING ACTIVITY

Information on the subjects dealt with in this section of the *Year Book* is contained in the annual printed bulletins *Manufacturing Industry* and *Manufacturing Commodities* issued by the Central Office of the Bureau. Information is also published, principally at the Australian (as distinct from State) level of aggregation, as soon as the data can be prepared, in a series of thirty-five annual bulletins, *Manufacturing Industries*, each relating to a particular industry or group of industries. Advance annual information at the Australian level of aggregation is published in *A Summary of Principal Statistics of Factories* and in *Principal Factory Products*, and for Victoria in the bulletin *Factory Statistics : Preliminary Statement*. Current information on factory products is available in the *Victorian Monthly Statistical Review* and the monthly Victorian bulletin *Secondary Production*.

In addition to the above-mentioned publications there is also a series of fifty-two *Monthly Production Summaries*, each relating to the production of a particular commodity or group of commodities at the Australian level of aggregation.

In respect of the year 1968-69 the Commonwealth Bureau of Census and Statistics has conducted the annual census of manufacturing industry as part of a programme of fully integrated economic censuses covering manufacturing and mining industries, and retail and wholesale trade. For a detailed description of the purposes served by this project, and of the new concepts and methods adopted, the reader is referred to the special article on these censuses on pages 368-89 of the *Victorian Year Book 1971*. A more detailed version of this article appears as Chapter 31 of the *Commonwealth Year Book 1970*.

The integrated economic censuses have been a major undertaking involving the development of new concepts, definitions, and procedures.

Inevitably there has been a considerable delay in finalising the results of the censuses and, for this chapter on manufacturing industry, it has not been possible to provide more up-to-date statistics than those for 1967-68 which were included in the 1970, and to a lesser extent in the 1971, *Year Books*. Results of the 1968-69 censuses will be available in a set of special bulletins, extracts from which will be published in future issues of the *Victorian Year Book*.

For 1969-70 the concepts, forms, and classifications used for factories (and mines) included in the 1968-69 integrated censuses were again adopted and it is expected that information for both years will be published at about the same time.

Manufacturing developments during 1970

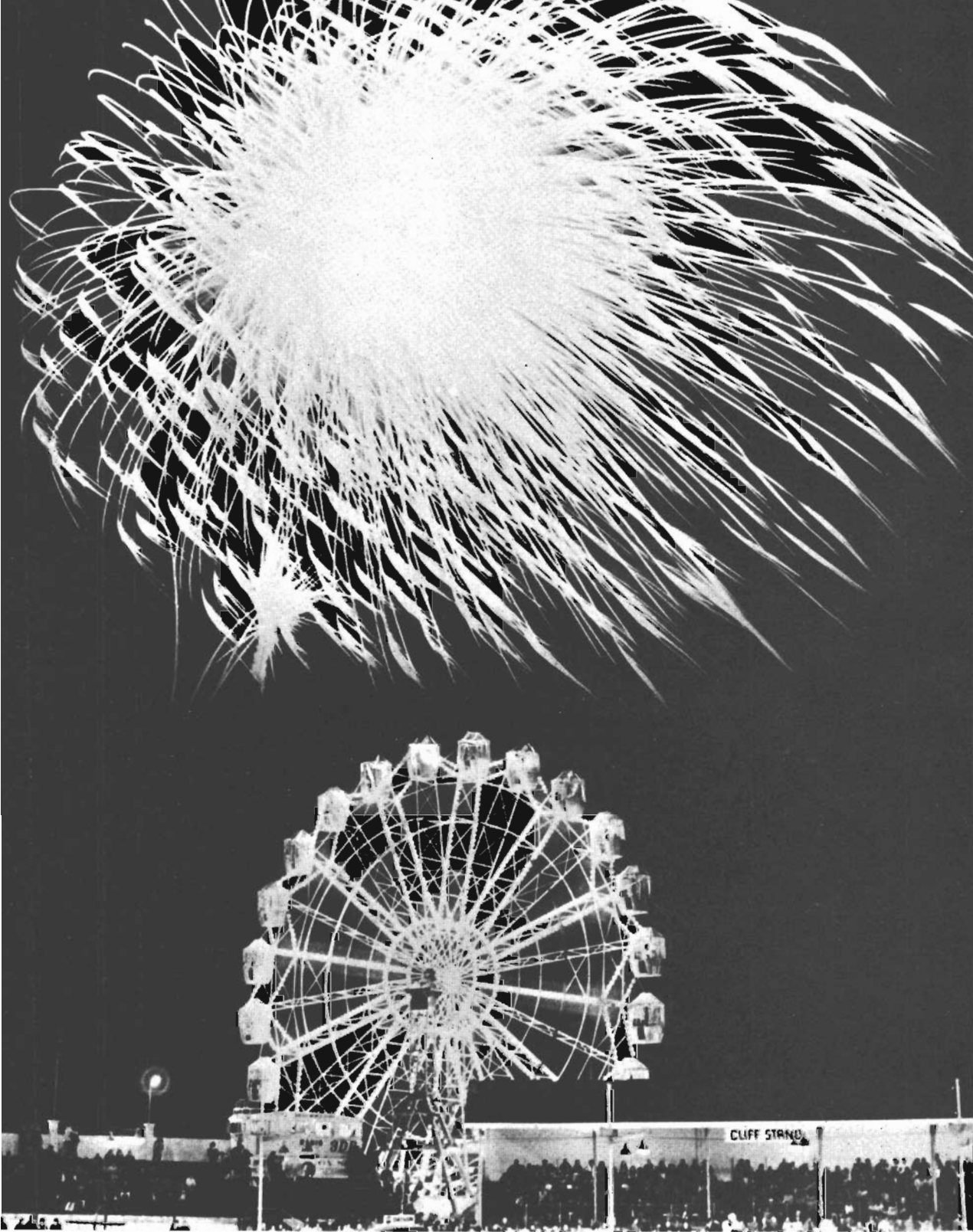
Victoria's manufacturing industries showed continued expansion in 1970. Development in the dairy products industry included the completion of a \$1m manufacturing, warehousing, and administration complex at Dandenong, with proposals for a modern development laboratory for dairy products. An automatic cheese making installation at Camperdown was completed at a cost of \$1.25m, and at South Melbourne a \$1.2m processed cheddar cheese factory commenced production. Several million dollars were invested on developments in the fruit canning industry in Shepparton.

Investment in new plant and equipment has continued in the Victorian textile and apparel industries during 1970. A \$6m factory to manufacture furnishing fabrics and mattress ticking was nearing completion at Lyndhurst. The woollen spinning mill in Wangaratta is undergoing a large expansion programme and a new wool carbonising plant with ancillary equipment has commenced operation at Williamstown. Considerable developments have taken place in Geelong, including a \$1m yarn factory, a new clothing factory which commenced operations early in 1970, and the modernisation of a worsted mill plant. A second direct melt glass furnace of \$1m has been added to the fibreglass textile factory at Dandenong.

Expansion of the building materials industry took place in Ballarat with the construction of a \$1.5m particle board mill with an expected output of 12 million sq ft per annum. A \$10m paper machine and associated plant was ordered for the pulp and paper mill at Maryvale in Gippsland, and a high speed printing machine costing more than \$5m was commissioned for a Box Hill plant late in 1970.

A major development in the heavy engineering industry was the commencement of construction of the sheet steel mill at Western Port. The first stage, a cold reduction mill, will have an ultimate capacity of 1.5 million tons per annum and is expected to come into operation in 1972. The total cost of the operation is estimated at between \$600m and \$1,000m. The expansion of a factory for earthmoving equipment components at Tullamarine was completed during 1970 at a cost of \$2.7m. A new steel fabricator is being established at Sunshine for the production of line pipe, commercial pipe, and structural tubing for general industry. This development will cost \$4m.

Light engineering industries have continued to expand in 1970. Construction of a new factory to produce telecommunications equipment was completed at Mulgrave. In the automotive industry, extensive developments are being undertaken with new plants and extensions. A \$1m plant to manufacture tools and fasteners was completed at North Croydon.



A rocket bursts high over the lighted ferris wheel at the Royal Melbourne Show.

The Herald and Weekly Times Ltd



Lake William Hovell reservoir and outlet tower on the King River shown before and after filling. The reservoir, opened in November 1971, has a storage capacity of 10,000 acre ft. It provides a water supply for the irrigated tobacco, hops, and grazing properties along the river from Cheshunt to Wangaratta.

State Rivers and Water Supply Commission



Developments in the chemical industry included the construction of an \$18m ethylene plant in Altona; a \$1.25m extension to the drying line of a synthetic rubber plant at Altona; and the current expansion of a high-density polyethylene plant in Altona at a cost of \$15m to increase capacity to 42,000 tons a year. The pharmaceutical industry has continued to expand with the completion of a \$5m manufacturing plant at Boronia, the construction of a \$2m factory at Altona, and a \$1.75m factory at Waverley to manufacture pharmaceuticals and cosmetics. During 1970 the construction of a brown coal coking retort and pilot plant with research facilities and offices was completed at Morwell. The project cost \$3m.

Government activities

Industrial legislation

The *Labour and Industry Act 1958* represents the development and consolidation of industrial legislation which had its beginnings in 1873. Among other matters, the Act deals with the registration and inspection of factories, guarding of machinery, and conditions of employment. It also provides for the appointment of Wages Boards and of the Industrial Appeals Court. Further information on these matters may be found on pages 163-96.

Child labour in factories

The *Labour and Industry Act of Victoria* debars employment in factories of children under the age of fifteen years, and the *Victorian Education Act* makes daily attendance at school compulsory between the ages of six and fifteen years.

Some children under fifteen may work in a shop or office if they are exempted under the *Education Act*, but the general effect of the two statutes contributes to the very low incidence of child labour in this State.

Decentralisation of manufacturing industries:

Division of State Development

Since the early stages of the Second World War successive State Governments have encouraged the development of existing manufacturing facilities and the establishment of new industries in country areas.

Concentration of Victoria's population in the metropolitan area of Melbourne is of increasing concern to both the people and Government alike. The inroads of mechanisation into primary industry and the subsequent lessening of employment opportunities have emphasised the need to develop other avenues for the employment of labour in the non-metropolitan parts of the State. In order to encourage establishment or expansion of secondary industry in country areas the Government offers a variety of incentives.

Crown land may be provided to industry with or without consideration. This facilitates the acquisition of a site adequate to meet all likely needs of future expansion and at the same time provides for a range of staff amenities.

Crown land, where available, may also be provided for housing purposes. Priority for houses built by the State Housing Commission may

be given for "imported" key personnel. Funds can also be made available to co-operative building societies for the express use of personnel nominated by a sponsored industry. As a further inducement to set up or expand manufacturing industry in non-metropolitan areas, loans at a moderate rate of interest are available through the Rural Finance and Settlement Commission.

To offset any locational disadvantages as compared with Melbourne, rail freight rates on raw materials and finished products are reduced to a nominal figure (as low as 10 per cent); charges for power, gas, and water can be subsidised, if necessary, to bring them in line with Melbourne rates; and, in respect of an approved decentralised industry, restriction on the use of road transport by company vehicles is eliminated.

There are also several other concessions which in themselves are minor, but which when applied in conjunction with the above, make country operations more attractive to many industries. The main drawback to decentralised industry is the shortage of skilled labour and small markets in these areas.

In an effort to promote the development of several important provincial centres, the Victorian Government has agreed in principle with certain recommendations made by a Decentralisation Advisory Committee which was headed by the Minister of State Development. It suggested that five particular areas in Victoria (Ballarat, Bendigo, the La Trobe Valley, Portland, and Wodonga) appeared to be the most suitable for extra promotion and development. Such development could help to check the imbalance of population in the State.

Development committees have been set up in each of these centres, membership of which includes representatives of local government and leaders of commerce and industry.

These committees work towards the general development of their areas with emphasis on the development and diversification of secondary industry, and the promotion of commercial services and other opportunities. In addition to these centres, the Government has pledged its interest and support for all other areas wishing to pursue a policy of industrial development.

Further reference, 1968

Commonwealth Department of Trade and Industry

The functions of this Department relate chiefly to the policy aspects of Australian overseas trade, both imports and exports, and the encouragement and development of Australian manufacturing industry.

It deals, among other things, with the development and diversification of Australian exports (including exports of manufactures) and, through the Office of Secondary Industry, with questions of protection to local industry against import competition, the special problems of small industries, the location of industry (decentralisation, etc.), and the efficiency of industry. It maintains liaison with such bodies as the Manufacturing Industries Advisory Council, the Export Development Council, and the Export Payments Insurance Corporation, and controls the Australian Trade Commissioner Service.

Protection of industry

The established policy of the Australian Government is to accord adequate and reasonable protection against import competition to economic and efficient industry. The Government seeks the advice of the Tariff Board on questions of protection for individual industries. The Board holds public inquiries into and reports on questions referred to it by the Minister. In cases of urgency, temporary protection may be accorded on the recommendation of a special advisory authority pending review by the Tariff Board.

The Customs Tariff is the accepted and normal instrument of protection to Australian industry. However, for some industries in special circumstances, assistance is accorded by means of bounties on local production. As a last resort, when other methods are inadequate, quantitative restrictions on imports are applied.

The Department of Customs and Excise administers the Customs Tariff and also operates the by-law system, under which plant and materials normally subject to protective duty may be admitted at concessional rates if no suitably equivalent products are reasonably available from local sources.

Scientific research and standardisation

Commonwealth Scientific and Industrial Research Organization

The functions of the Organization, as described in the Science and Industry Research Act, are to initiate and conduct research in connection with industries in Australia, to train research workers, to establish industrial research studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardisation of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research.

Standards Association of Australia

This Association is the national standardising organisation of Australia and issues standard specifications for materials and codes of practice. Specifications and codes are prepared and revised periodically in accordance with the needs of industry and standards are evolved and accepted by general consent. It is the Australian member body of the International Organisation of Standardisation and of the International Electrotechnical Commission.

National Association of Testing Authorities

This is the Australian organisation for approval of testing laboratories. The Association registers laboratories of governmental and industrial testing authorities, thereby organising a national testing service. Registration of laboratories is voluntary. Owners of registered laboratories are members of the Association. They have the right to endorse their test documents in the name of the Association, to indicate their technical and managerial competence.

Summary of factory statistics

Factory statistics compiled for 1967-68 were the last of the old series. The first bulletin of statistics from the 1968-69 Economic Censuses (see

pages 368–89 of the *Victorian Year Book* 1971 for details), *Manufacturing Establishments and Electricity and Gas Establishments: Preliminary Statement*, was issued in January 1971 and contained information in respect of ten industry subdivisions which permitted comparisons to be made between States, but did not permit comparisons to be made between 1968–69 and previous years because of the changes in the definition of the establishment, bases of classification, and forms. Accordingly, brief information in respect of factories for 1967–68 and previous years has been repeated in this *Year Book* to record the nature and location of secondary industry in Victoria, which changes little from year to year. Definitions used in the 1967–68 and previous factory censuses were published in the *Victorian Year Book* 1971 pages 394–7.

The following table shows, at intervals between 1901 and 1967–68, the development of manufacturing industry in Victoria:

VICTORIA—SUMMARY OF FACTORY DEVELOPMENT

Year	Factories	Employment (a)	Salaries and wages paid (b)	Value of—			
				Materials and fuel used	Production (c)	Output	Land, buildings, plant and machinery
	number	number	\$'000	\$'000	\$'000	\$'000	\$'000
1901	3,249	66,529	(d)	(d)	(d)	(d)	24,596
1911	5,126	111,948	17,822	51,334	32,162	83,496	27,516
1920–21	6,532	140,743	42,754	135,171	76,846	212,017	70,985
1932–33	8,612	144,428	42,437	122,070	81,900	203,970	135,655
1940–41	9,121	237,636	104,590	240,696	178,002	418,698	184,100
1946–47	10,949	265,757	155,988	367,883	262,992	630,875	243,755
1953–54	15,533	331,277	472,073	1,154,381	816,629	1,971,010	678,535
1960–61	17,173	388,050	775,998	1,913,978	1,417,546	3,331,524	1,641,886
1963–64	17,597	413,120	912,424	2,305,046	1,749,776	4,054,822	2,061,518
1964–65	17,925	432,389	1,028,492	2,551,121	1,949,665	4,500,786	2,233,660
1965–66	17,980	439,149	1,077,234	2,597,230	2,027,685	4,624,915	2,385,957
1966–67	18,054	445,557	1,167,872	2,814,145	2,236,370	5,050,515	2,616,977
1967–68	18,030	449,945	1,244,216	2,956,509	2,394,801	5,351,311	2,685,255

(a) Average employment over whole year, including working proprietors.

(b) Excludes drawings of working proprietors.

(c) Value of output less value of materials, etc.

(d) Not available.

A comparison of Victorian factory activity with that in other States is shown in the following table:

AUSTRALIA—FACTORIES, 1967–68

State	Factories	Employment (a)	Salaries and wages paid (b)	Value of—			
				Materials and fuel used	Production (c)	Output	Land, buildings, plant and machinery
	number	number	\$m	\$m	\$m	\$m	\$m
New South Wales	24,884	531,185	1,498.1	3,965.5	3,131.0	7,096.5	3,828.2
Victoria	18,030	449,945	1,244.2	2,956.5	2,394.8	5,351.3	2,685.3
Queensland	6,154	120,852	306.0	1,124.4	657.9	1,782.3	946.7
South Australia	6,255	121,417	330.1	844.2	631.9	1,476.1	813.6
Western Australia	5,404	67,335	175.1	499.2	388.3	887.4	495.3
Tasmania	1,797	35,178	96.2	247.1	198.0	445.1	448.1
Northern Territory	188	1,519	5.0	9.2	9.7	18.8	14.9
Australian Capital Territory	241	3,710	11.3	16.9	19.3	36.2	33.4
Total	62,953	1,331,141	3,665.9	9,662.9	7,430.7	17,093.7	9,265.3

See footnotes to table above.

A general indication of the geographical distribution of factories in the State is shown in the next table where secondary industry in Victoria for 1967-68 is classified according to Statistical Divisions :

VICTORIA—FACTORIES IN STATISTICAL DIVISIONS, 1967-68

Statistical Division	Factories	Employment (a)	Salaries and wages paid (b)	Value of—			
				Materials and fuel used	Production (c)	Output	Land, buildings, plant and machinery
	number	number	\$'000	\$'000	\$'000	\$'000	\$'000
Melbourne	13,108	370,728	1,035,768	2,327,610	1,934,482	4,262,092	1,946,491
West Central	651	20,075	58,271	191,016	124,002	315,018	192,878
North Central	376	4,774	10,989	18,794	20,907	39,701	19,113
Western	1,028	15,809	37,792	100,325	65,487	165,813	68,844
Wimmera	384	2,426	4,835	11,826	9,421	21,247	7,587
Mallee	315	2,584	5,222	9,963	9,316	19,279	11,412
Northern	854	12,229	31,241	126,963	64,950	191,913	80,207
North Eastern	453	5,457	13,668	36,120	29,399	65,519	78,800
Gippsland	655	13,630	41,292	116,481	127,913	244,395	269,988
East Central	206	2,233	5,139	17,410	8,924	26,334	9,935
Total	18,030	449,945	1,244,216	2,956,509	2,394,801	5,351,311	2,685,255

For footnotes see page 388.

Factories in the Melbourne Statistical Division constituted 72.7 per cent of the total number in Victoria in 1967-68, 83.0 per cent of the persons employed, and 80.9 per cent of the value of production.

For information regarding the actual location of the Statistical Divisions named in the table, reference should be made to the maps folded inside the back cover of this book. The number of factories and persons employed therein in each Statistical Division is shown in the following table :

VICTORIA—NUMBER OF FACTORIES AND PERSONS EMPLOYED (a) IN EACH STATISTICAL DIVISION : CLASSIFIED ACCORDING TO SIZE OF FACTORY, 1967-68

Size of factory (persons)	Statistical Division									
	Mel-bourne	West Central	North Central	West-ern	Wim-mera	Mallee	North-ern	North East-ern	Gipps-land	East Central
NUMBER OF FACTORIES										
Under 5	4,786	319	221	536	248	180	484	256	293	108
5-10	3,165	163	91	284	95	84	192	92	163	55
11-20	2,031	70	31	93	22	25	92	67	106	27
21-50	1,717	53	13	64	14	15	37	24	52	5
51-100	693	18	13	23	3	10	32	7	19	7
101-500	641	21	5	25	2	1	14	6	16	4
Over 500	75	7	2	3	..	..	3	1	6	..
Total	13,108	651	376	1,028	384	315	854	453	655	206
AVERAGE NUMBER OF PERSONS EMPLOYED DURING PERIOD OF OPERATION										
Under 5	11,518	(b)	(b)	1,305	538	495	1,124	(b)	684	254
5-10	22,443	1,084	623	1,949	628	655	1,303	630	1,061	368
11-20	29,870	1,049	432	1,307	335	478	1,337	956	1,448	367
21-50	54,347	1,652	393	1,984	385	634	1,129	715	1,468	164
51-100	48,653	1,287	854	1,782	(b)	(b)	2,216	460	1,238	(b)
101-500	127,446	5,798	1,002	5,614	(b)	(b)	(b)	1,284	(b)	(b)
Over 500	78,682	(b)	(b)	2,002	..	..	(b)	(b)	(b)	..
Total	372,959	20,200	4,800	15,943	2,479	3,090	12,327	5,546	13,259	2,258
										452,861

(a) Average employment over whole year, including working proprietors.

(b) Not available for publication.

The above table shows that in 1967-68 there were 832 factories each employing more than 100 persons with a total employment of 245,990 persons in Victoria. Of the 18,030 factories (452,861 persons) in Victoria, 13,108 (372,959 persons) were located in the Melbourne Statistical Division and 651 (20,200 persons) in the West Central Statistical Division which includes Geelong. The balance, 4,271 factories (59,702 persons) were distributed over the remainder of the State, principally in the Western (1,028 factories), Northern (854 factories), and Gippsland (655 factories) Statistical Divisions.

It should be noted that Geelong is located in the West Central Statistical Division, Castlemaine and Maryborough in the North Central Statistical Division, Ballarat and Warrnambool in the Western Statistical Division, Bendigo and Shepparton in the Northern Statistical Division, Wangaratta in the North Eastern Statistical Division, and Morwell and Yallourn in the Gippsland Statistical Division.

Some of the principal factory products of Victoria and Australia

Annual quantity and value

The next table shows quantities of some of the principal articles manufactured in Victoria, and corresponding figures for Australia during 1968-69 and 1969-70. Owing to the limited number of producers, it is not permissible under statute to publish particulars regarding some articles of manufacture which would otherwise appear in the following table :

VICTORIA AND AUSTRALIA—PRINCIPAL ARTICLES MANUFACTURED

Commodity Code No.	Article	Unit of quantity	Victoria		Australia	
			1968-69	1969-70	1968-69	1969-70
023.18, 20	Bacon and ham (a)	mill lb	19	21	113	121
027.02-29, 72-77; 023.17	Meat—canned (excluding baby food)	mill lb	61	70	99	102
051.21-28; 052.42	Milk—condensed, concentrated, and evaporated	mill lb	101	139	159	156
051.31	Butter	mill lb	280	314	439	494
051.36-46	Cheese	mill lb	75	70	164	168
051.61	Ice cream	mill gals	11	12	39	42
051.72-73	Milk—powdered : full cream	mill lb	31	27	54	52
062.01, 32	Flour, plain—wheaten (including sharps)	'000 short ton	391	391	1,363	1,364
063.11, 21, 31	Malt	mill bush	8	9	14	14
064.21	Biscuits	mill lb	84	90	239	243
076.08, 15, 22	Canned or bottled apricots, peaches, and pears	mill lb	210	306	321	421
076.60	Jams, fruit spreads, fruit butters, etc.	mill lb	43	38	92	80
094.02-47	Vegetables canned or bottled (including pickled)	mill lb	43	43	192	206
104.06-18	Confectionery—					
104.21-29	Chocolate base	mill lb	45	43	109	103
123.18	Other without chocolate	mill l	46	51	114	123
152.06	Sauce—tomato	mill imp pint	21	19	30	28
171.03, 07, 08	Pollard	'000 short ton	88	88	312	312
242.07-11	Aerated and carbonated waters, canned or bottled (b)	mill imp gals	34	37	134	143
242.33, 35, 46, 47;	Wool—scoured or carbonised	mill lb	58	62	156	162
261.41	Wool tops—pure and mixed	mill lb	23	22	55	54
372.22-50	Briquettes—brown coal	'000 ton	1,471	1,539	1,471	1,539
372.52-62; 374.51-55	Cloth piece goods woven—Woollen or predominantly woollen	mill sq yd	10	12	24	25
401.57	Blankets, bed (c)	'000	733	788	1,489	1,596
	Acid—sulphuric	'000 ton	509	495	1,853	1,748

VICTORIA AND AUSTRALIA—PRINCIPAL ARTICLES MANUFACTURED—*continued*

Commodity Code No.	Article	Unit of quantity	Victoria		Australia	
			1968-69	1969-70	1968-69	1969-70
403.02, 18, 20, 52-92, 96; 404.01-98 472.01, 03	Plastics and synthetic resins	'000 cwt	1,846	2,200	3,860	4,394
474.12	Bricks—clay	mill	422	437	1,612	1,697
475.30	Tiles, roofing— Terracotta	mill	14	15	50	53
479.32, 33	Concrete	mill	38	41	116	131
503.21-32	Plaster sheets	mill sq yd	15	16	35	40
	Electric motors	'000	726	786	3,203	3,359
581.02-08, 10-16	Finished motor vehicles (d)— Cars	'000	150	180	342	394
582.04-28	Other	'000	21	23	53	57
651.11-17	Radiators and electric fires (domestic)	'000	777	683	803	714
661.21-23	Toasters (domestic)	'000	221	203	392	375
671.14	Sinks—stainless steel	'000	80	101	220	249
773.02-35	Shirts (men's and boys') Underwear—	'000 doz	1,058	1,128	2,326	2,491
773.90, 94; 774.01- 17, 36-39, 96, 97	Men's and boys'	'000 doz	1,041	1,063	2,387	2,502
774.44, 46, 48, 48, 61, 63, 68-73	Women's and girls'	'000 doz	2,589	2,732	4,303	3,959
775.01-19	Stockings—women's (e)	'000 doz pair	4,766	4,972	5,622	5,859
775.51-82, 91-98, 776.01-42	Socks and stockings—men's, children's and infants'	'000 doz pair	2,725	2,851	2,999	3,067
791.01, 03, 09, 10, 15, 17, 18, 20 22, 28, 29	Footwear— Boots, shoes, and sandals (f)— Men's and youths'	'000 pair	6,219	6,701	11,349	11,882
791.31, 33, 39, 40, 45, 47, 48, 50 53, 58, 59	Women's and maids'	'000 pair	14,216	14,417	20,088	20,394
791.61, 62, 66, 69, 70 74, 76, 82, 79, 81, 78, 87-89, 91-97, 99	Children's (including infants')	'000 pair	4,459	4,900	6,733	6,921
791.05, 07, 35, 37, 63 64, 83, 85, 86	Slippers	'000 pair	3,267	3,208	3,972	3,818
805.01-13	Soaps and soap based products— Personal toilet use	'000 cwt	119	122	502	523
805.22-60	Other purposes	'000 cwt	120	196	890	781
844.22-67	Mattresses—all types	'000	476	512	947	1,031

(a) Cured bone-in weight of smoked and cooked bacon and ham.

(b) From October 1969 includes bulk aerated and carbonated waters.

(c) Double, three quarter, single; wool, wool mixture and other fibre.

(d) Excludes vehicles finished by specialist body building works outside the motor vehicle manufacturers' organisation.

(e) Includes panty hose.

(f) Excluding wholly of rubber.

Monthly production statistics

The Bureau collects monthly production returns and makes available printed tables of Australian production statistics within a few weeks of the month to which they relate. A list of the subjects included in these production summaries is given below.

In addition, statistical bulletins for the Meat, Gold Mining, and Dairying Industries, and Minerals and Mineral Products are issued each month. Australian totals for a greater range of commodities are published in these bulletins and production summaries than are published in the *Monthly Bulletin of Production Statistics*. Victorian figures are published in the Victorian monthly bulletin *Secondary Production*.

AUSTRALIA—PRODUCTION SUMMARIES

Ref. No.	Subject	Ref. No.	Subject
1	Automotive Spark Plugs and Shock Absorbers	28	Footwear
2	Chemicals, etc.	29	Biscuits, Cocoa, Confectionery, Ice Cream
3	Plastics and Synthetic Resins and Plasticisers	30	Storage Batteries—Wet Cell
4	Paints and Other Surface Coatings	32	Perambulators, Pushers and Strollers
5	Electricity and Gas	33	Motor Vehicles
6	Soaps, Detergents, Glycerine and Fatty Acids	34	Television, Radios, Other Sound Equipment: Transistors
7	Internal Combustion Engines	35	Bed Bases and Mattresses
8	Lawnmowers	36	Processed Milk Products
9	Electrical Appliances	38	Fish Preserving
10	Motor Bodies, Trailed Vehicles, Lift-on Freight Containers, etc.	39	Jams, Preserved Fruit, Quick Frozen Vegetables and Potato Crisps
11	Pedal Cycles	40	Cereal Products
12	Meters	41	Vegetable Oils, Margarine and other Edible Processed Fats
13	Building Fittings	42	Malt and Beer
14	Cotton Goods	43	Stock and Poultry Foods and Canned Pet Food
15	Fellmongering, Wooll scouring and Carbonising	45	Phonograph Records
16	Wool Top Making and Yarn Produced	47	Aerated and Carbonated Waters, Cordials and Syrups
17	Wool Woven Fabric, etc.	48	Sports Goods
18	Hosiery	49	Building Materials
19	Women's, Maids' and Girls' Clothing, and Infants' and Babywear	50	Electrodes for Manual Welding
20	Cellulosic and Synthetic Fibre Tops, Yarns and Woven Fabrics	51	Hides and Skins Used in Tanneries
21	Paper, Wood Pulp and Adhesive Tapes	52	Electrical Power Frequencies, Transformers, Chokes and Ballasts
22	Floor Coverings and Felts	53	Plastics Film, Sheet and Coated Materials
23	Electric Motors	55	Butter and Cheese
24	Men's, Youths' and Boys' Clothing	56	Canned Meat
25	Foundation Garments	58	Steel Wire and Wire Products
27	Gloves and Slide Fasteners	59	Non-ferrous Rolled, Extruded and Drawn Products

INDIVIDUAL INDUSTRIES

Details of most individual industries published in previous *Victorian Year Books* have been deleted in this edition. However, publication will be resumed when the results of the integrated censuses are known.

Light engineering

The light engineering industry in Victoria plays a significant part in the economy, both as an employer and through the manufacture of a variety of goods sold within Australia and exported to other countries.

The term light engineering covers the manufacture of various industrial and domestic products and small components produced by a variety of methods for use in many industries both within the light engineering and other manufacturing fields. In Victoria the industry tends to be centred in the Melbourne metropolitan area and the cities of Geelong, Ballarat, and certain other country centres.

Major factors which have affected and accelerated the growth of the industry in Victoria have been improvements in technology, rising living standards and the growing demand for a variety of goods, many of which had previously been regarded as luxuries, but are now regarded as necessities.

History

Before the First World War the light engineering industry in Victoria was in its infancy. The demands for the manufacture of machines, the level of technology existing at the time, the subordinate position of Australia in terms of world trade, the general standard of living, and the practice of importing rather than manufacturing so many of the items used all combined to produce a very limited demand for light engineering facilities and services. Most activity in this field was aimed at the local market by way of repair and maintenance of imported equipment. There was, however, a growing expansion of some light engineering which was geared to the expansion of certain manufacturing industries. This expansion was accelerated by the demands placed on the industry by the First World War, when local manufacturers were called upon to produce many components and machines previously imported.

In the period between the First and Second World Wars the industry, although affected by the economic depression of the early 1930s, continued to expand and diversify to meet the growing demands of an increasing population. Many new manufacturing industries emerged, all placing demands either directly or indirectly on light engineering, facilities for improved methods and technology in design, and the manufacture of more sophisticated machines and tooling. The major example in Victoria of the changes which were taking place in the light engineering industry in the 1920s was the manufacture of motor cars which were transformed from custom built items to mass-assembled articles for a growing market.

The assembly of motor vehicles in Australia, mainly from imported components has been a well established industry since 1925 when a vehicle assembly line was set up in Geelong. By the end of the 1920s Australian manufacturers, with encouragement from the Commonwealth Government, had obtained a large share of the market for the supply of new and replacement parts such as springs and other such generally uniform parts required in large quantities for incorporation in locally assembled vehicles and for use in repairs. The vehicle industry in Victoria has in fact relied to an increasing extent on the expanding facilities of the light engineering industry for the manufacture of precision components and accessories.

When the Second World War began, demands on the industry again increased because of restrictions on the import of engineering products. Much of this then had to be manufactured locally to meet the demands of Australia and her allies. The war brought with it the direct threat of invasion and the inability to obtain imported supplies stimulated industry to expand plant and capacity on an unprecedented scale. It resulted in a large measure of industrial maturity for Victoria and Australia as a whole which is shown by such achievements in light engineering as the production of a wide range of communications equipment, machine tools and precision instruments, engines of many types not previously made here including marine and aero engines, and aircraft and diesel injection equipment. Many of the products produced in quantity by Australian industry during the war had previously been considered to be beyond its capacity.

Much of this capacity was turned to civilian production in the post-war years. The range and variety of production was expanded, new industries were

established, and overseas capital and technical knowledge assumed greater importance. Whereas the methods and the speed of manufacture in the early decade of the century were limited by the range of machinery and level of technology then existing, the light engineering industry, through the introduction of more efficient and versatile machinery gradually enabled a wider range of items to be manufactured. Items which were once regarded as heavy industry products were increasingly being produced in quantity by the light engineering industry. Examples include the manufacture of parts and components for motor vehicles, agricultural and earthmoving machinery, etc. Improvements in the type and variety of metals available also assisted the industry and this, together with the improvements noted above, made for greater speed and volume of production.

Present situation

The light engineering industry in Victoria is important because so many manufacturing processes, both engineering and otherwise, rely to some degree on this branch of industry to supply, service, and repair their equipment and the components used in manufacture. Much of the machinery and replacement parts used in industries such as packaging, printing, food, chemicals, textiles, clothing, etc., are manufactured by the light engineering industry which also supplies components to the vehicle, aircraft, building, furniture, and other industries. The light engineering industry provides a wide range of products made of sheet metal. These include components for household appliances, office and other fabricated equipment, architectural work, aircraft, steel and light alloy fabricated equipment, and fabrication of air-conditioning systems. Instrumentation is another important area where the manufacture and repair of instruments is carried out for many industries, including petrochemical, plastics, aircraft, printing, etc.

There are many examples of light engineering industries which have expanded greatly since 1940. These include such sections of the electrical goods manufacturing industry as the manufacture of radio and television receivers, switch gear, telephone and other communications equipment, electric motors, domestic appliances used for heating, cooking, and refrigerating, washing machines, motor mowers, electric hand tools, fans, and air conditioners. Many products which did not exist in 1940 have been developed and are now manufactured in quantity. Aluminium window frames and television receivers are examples of such products.

Machines and equipment used in the light engineering industry are hydraulic and mechanical presses, guillotines, lathes (automatic, semi-automatic, and manually operated), drilling and tapping machines, welding machines (both automatic and manual), special purpose forming and cutting machines, and die-casting machines. Products of the industry are made by such operations as machine fabricating, cutting, joining by bolt, rivet, or screw or welding, and the assembly of machined or formed components.

Individual companies engaged in the field are involved in the mass-production of components for particular industries, the manufacture to order of individual items, and the manufacture of completed products, machines, etc., for domestic or industrial use. Others offer service or repair facilities to industry generally.

Some products of the light engineering industry made in Victoria, together with the names of some of the companies making these articles are shown in the following table :

Product	Company
Air conditioning and refrigeration equipment	Crockford & Robertson Pty Ltd
Automotive components	Email Ltd
	Robert Bosch (Aust.) Pty Ltd
	Joseph Lucas (Aust.) Pty Ltd
	Repco Ltd
Cutlery manufacturers	Mytton Grosvenor Ltd
Electric fans	Rodd (Aust.) Ltd
	Mistral Fans Co.
Electric hand tools	Warner-Drayton Co. of Aust Pty Ltd
	Black & Decker (A'asia) Pty Ltd
Electrical apparatus, radio, television, etc.	Skil-Sher Pty Ltd
	Radio Corporation Pty Ltd
Electrical domestic appliances	Thorn Electrical Industries (Aust.) Pty Ltd
	Metters Ltd
Engineers' small tools	Vulcan Aust. Ltd
	Patience & Nicholson Pty Ltd
Hardware and hand tools	Sutton Tools Pty Ltd
	Cyclone Forgings Pty Ltd
	Ogden Industries Pty Ltd
Motors (electric)	Trojan Pty Ltd
	ASEA Electric (Aust.) Pty Ltd
	Brehaut, H. E. Pty Ltd
	Busch Electric Co. Pty Ltd
	McColl Electric Works Pty Ltd
Office and storage equipment	Bendix Consolidated Industries Ltd
	Brownbuilt Ltd
Telephone equipment	Steelbuilt Aust. Pty Ltd
	G.E.C. (Australia) Pty Ltd
	L. M. Ericsson Pty Ltd
Toolmakers	Siemens Industries Ltd
	W. G. Goetz and Sons Ltd
	Zenford Pty Ltd
Welding equipment	Commonwealth Industrial Gases Ltd
	Liquid Air Aust. Ltd
Stoves, ranges, cookers	Craig and Seeley Ltd
	Hecla Electrics Pty Ltd
	Radiation (Australia) Ltd
Wire fabricators	Cyclone K-M Products Pty Ltd
	Greer and Ashburner Pty Ltd

History of manufacturing, 1961; Motor vehicle industry, 1962; Chemical industry, 1963; Petrochemical industry, 1964; Glass industry, 1965; Agricultural machinery industry, 1966; Aluminium industry, 1967; Automation and technical development in industry, 1967; Textile industry, 1968; Canning of foodstuffs, 1969; Butter, cheese, and processed milk products, 1970; Heavy engineering, 1971

ENERGY

Ministry of Fuel and Power

Following the discovery of natural gas off the east Gippsland coast early in 1965, and anticipating the discovery of oil, the Government, reviving an earlier proposal, passed the *Fuel and Power Act 1965*, establishing the Ministry of Fuel and Power, to determine the means by which the present and future supplies of fuel and power could be developed and utilised.

Private oil and gas companies may refer legislative and other problems concerned with the production and marketing of energy to the Ministry, which has authority to examine proposals and give decisions.

The Minister of Fuel and Power is responsible for the operations of the State Electricity Commission of Victoria and the Gas and Fuel Corporation of Victoria. The Victorian Pipelines Commission was established on 1 March 1967 under the provisions of the *Victorian Pipelines Commission Act 1966* to lay pipelines for the transmission of gas throughout Victoria (see pages 370 and 372). The Commission was abolished on 1 July 1971 and its assets and function were transferred to the Gas and Fuel Corporation.

Further reference, 1971

State Electricity Commission of Victoria

The State Electricity Commission, which was constituted by the *Electricity Commissioners Act 1918*, is a semi-governmental authority administered since 1921 by a full-time chairman and three part-time commissioners. The principal duty of the Commission is to co-ordinate and extend on an economic basis the supply of electricity throughout Victoria.

For this purpose it is vested with power to erect, own, and operate power stations and other electrical plant and installations, supply electricity retail to individual consumers or in bulk to any corporation or public institution, acquire and operate electricity undertakings, develop, own, and operate brown coal open cuts and briquetting works, develop the State's hydro-electric resources, and form or acquire interests in any company for the purpose of selling char, coal, and briquettes.

From its own revenues, which it controls, the Commission must meet all expenditure in the operation of its power, fuel, and subsidiary undertakings, and all interest and other charges incurred in the service of its loans and other capital commitments.

The Commission is the controlling authority for all electrical undertakings in Victoria. It is responsible for the registration of electrical contractors, the licensing of electrical mechanics, the control of installation methods and material, and the testing and approval of electrical equipment and appliances.

Electricity generation

Since it began operating in 1919 the State Electricity Commission has expanded and co-ordinated the production and supply of electricity on a State-wide basis to the point where its system now generates almost all the electricity produced in Victoria and serves virtually all the population.

Development of Victoria's electricity system is based on the utilisation for both power and fuel of Victoria's extensive brown coal resources in the La Trobe Valley in Gippsland, with supplementary development of the hydro-electric potential of north-eastern Victoria. Victoria is entitled to one third of the electricity from the Snowy Mountains Hydro-electric Scheme, after the Commonwealth has taken the power it needs. Victoria also shares with New South Wales in the electricity generated at the Hume Hydro Station on the River Murray.

By far the greater part of the State's electricity is generated from brown coal, either used in its raw state or manufactured into higher quality

fuel in the form of brown coal briquettes. All the brown coal and briquette fuel is supplied by undertakings which the Commission itself owns and operates. Output of brown coal in 1970-71 from the three open cuts at Yallourn, Yallourn North, and Morwell totalled 21.5 million tons, of which 17.4 million tons were used in the Commission's own power stations, and 3.8 million tons were manufactured into 1.4 million tons of brown coal briquettes, 16 per cent of the briquette output then being used for electricity production, mainly in Newport Power Station. The two functions, generation of electricity and production of fuel, are closely integrated. Apart from the large proportion of brown coal and briquette fuel consumed in the power stations, the process of briquette manufacture results also in the generation of electricity, since the steam needed for processing the raw coal for briquetting is first used to operate turbo-generators.

Electricity supply

At 30 June 1971 the number of ultimate consumers in Victoria was 1,286,902. All of these were served by the State system except for 182 served by local country undertakings at Bendoc and Mallacoota in the far east of the State. The State system supplies all the Melbourne metropolitan area and 2,297 other centres of population.

By 30 June 1971 almost all the dwellings in the State, and 73,801 of Victoria's 75,000 possible farm connections were supplied with electricity.

Electricity supply has been extended almost throughout the State and there are now only a few remote areas not served by the State distribution system.

The Commission sells electricity retail in all areas except part of the metropolitan area, where it sells in bulk to eleven municipal undertakings which operate as local retail supply authorities under franchises granted before the Commission was established. Bulk supply is also being provided at present to several New South Wales municipalities and irrigation settlements bordering the River Murray. The number of consumers served by the State system outside the Melbourne metropolitan area is 624,476.

The Commission's retail consumers numbered 1,045,287 at 30 June 1971. Retail supply is administered through the Metropolitan Branch and nine extra-metropolitan branches (Barwon, Eastern Metropolitan, Gippsland, Mallee, Mid-Western, North-Eastern, Northern and Midland, South-Western, and Wimmera). At 30 June 1971 there were branch and district supply offices in Melbourne and 94 other cities and towns in Victoria.

Electricity production, transmission, and distribution

Electricity generated in the State system or purchased by it totalled 14,086 million kWh in 1970-71, or more than 99 per cent of all Victoria's electricity for public supply. The system comprises a series of thermal and hydro-electric power stations. Inclusive of generator capacity both within the State and available to the Victorian system from outside the State, the total installed generator capacity at 30 June 1971 was 3,530,565 kW. Power stations are interconnected and feed electricity into a common pool for general supply.

The major power station in this interconnected system is the brown coal burning power station at Hazelwood, which alone generates 53 per

cent of Victoria's electricity. It became fully operational with eight 200 MW generating sets in service in 1971. Other power stations in the interconnected system comprise two further base-load power stations—Yallourn (which contributes 20 per cent) and Morwell; steam stations in Melbourne (Newport, Richmond, and Spencer Street), Geelong, and Ballarat, and also at Red Cliffs, which has, in addition, some internal combustion plant; and hydro-electric stations at Kiewa, at Eildon, on the Rubicon and Royston Rivers near Eildon, and at Cairn Curran, on Eppalock Reservoir on the Campaspe River near Bendigo. All major power stations within Victoria are Commission owned, except Spencer Street Power Station, which remains the property of the Melbourne City Council, although operated as a unit in the interconnected system.

The following table shows the predominant part taken by the State Electricity Commission in the generation of public supply electric power in Victoria, the amount of power generated by water power and other sources, and the relative importance of the main power stations:

VICTORIA—PUBLIC SUPPLY ELECTRICITY GENERATED, POWER STATIONS, AND SOURCES OF POWER, 1970-71

Station or origin of power	Source T = Thermal (a) H = Hydro	Quantity	Percentage of production
		mill. kWh	
State Electricity Commission—			
Own generation—			
Hazelwood Power Station	T	7,423.6	54.2
Yallourn Power Station and Briquette Factory	T	2,860.2	20.9
Morwell Power Station	T	1,109.2	8.1
Newport Power Station	T	202.1	1.5
Spencer Street Power Station (b)	T	63.5	0.4
Richmond Power Station	T	35.7	0.3
Provincial thermal power stations	T	2.3	..
Total S.E.C. thermal generation	T	11,696.6	85.4
Eildon	H	403.2	2.9
Kiewa	H	445.3	3.3
Total S.E.C. hydro generation	H	848.5	6.2
Other public supply generation	T	0.2	..
Total generation by public supply undertakings	T and H	12,545.3	91.6
Net interstate purchases	T and H	1,151.3	8.4
Total	T and H	13,696.6	100.0

(a) Includes internal combustion.

(b) Melbourne City Council.

A 330 kV transmission line links the Victorian system with the Snowy Mountains undertaking, and also provides facilities for interconnection between the Victorian and New South Wales State generating systems. Also linked with the Victorian interconnected system is the hydro station at Hume Reservoir on the River Murray. This power station is operated by the Electricity Commission of New South Wales. Output and operating costs are shared by Victoria and New South Wales.

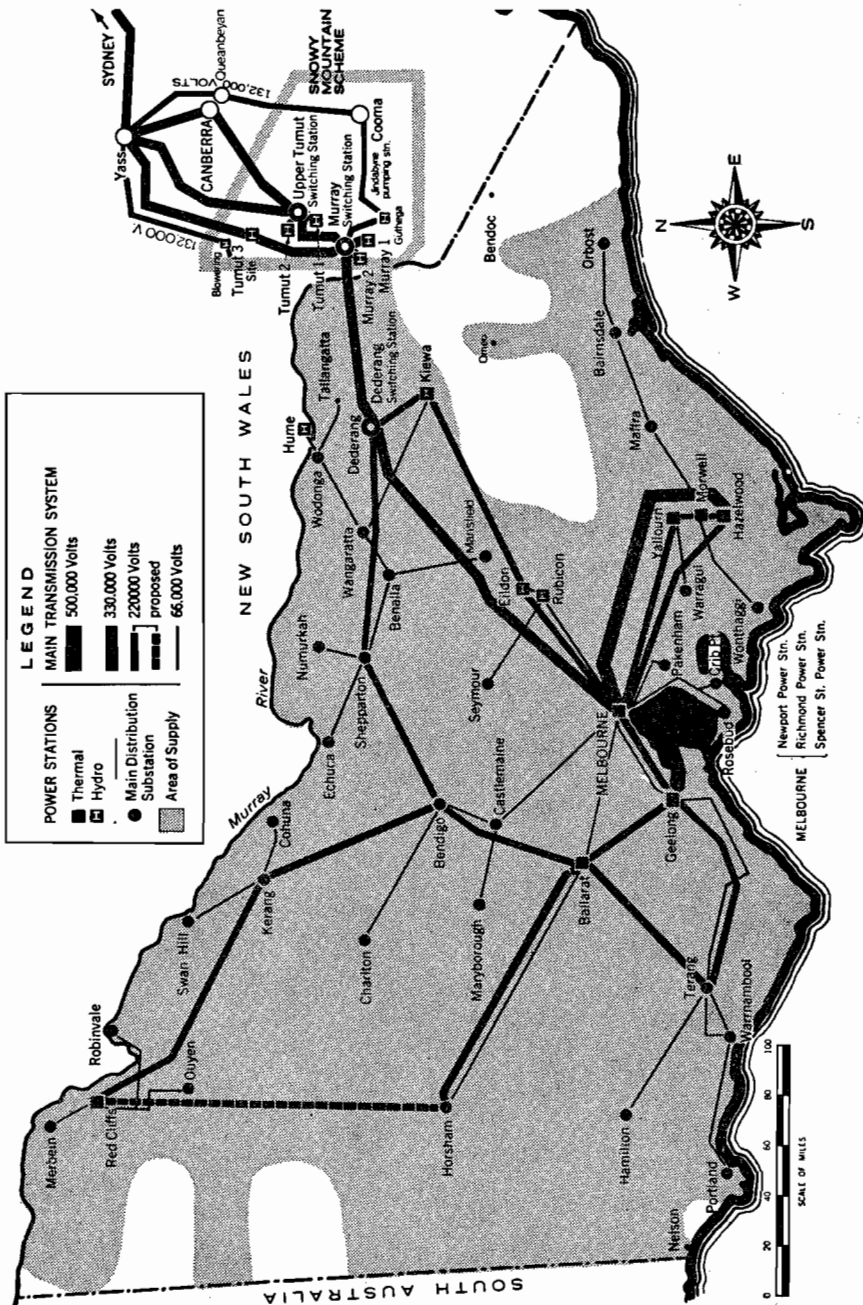


FIGURE 8. Victoria's main power transmission system.

In meeting the total demand on the system, which fluctuates throughout the day and from month to month, each group of stations in the interconnected system is assigned a predetermined function dependent upon the availability of power from each group and the economics of generation. The various stations are utilised in the combination that will meet the system load most economically at a given time.

The electrical transmission and distribution system in the State supply network at 30 June 1971 comprised 62,471 miles of power lines, 4 auto-transformation stations, 26 terminal receiving stations, 161 zone substations, and over 64,200 distribution substations. Main transmission is by 500 kV, 330 kV, 220 kV, and 66 kV power lines which supply the principal distribution centres and also provide interconnection between the power stations. The 500 kV, 330 kV, and 220 kV systems total 1,945 route miles.

The transmission of energy from Hazelwood at 500 kV is at the highest voltage for electricity transmission in the southern hemisphere. A second 500 kV transmission line from the La Trobe Valley came into service in 1971.

Hazelwood Power Station

Hazelwood Power Station is the largest generating project so far constructed by the State Electricity Commission of Victoria and is a major power development by world standards. It has a capacity of 1,600,000 kW, or about 40 per cent of all the generating capacity available to Victoria in 1972. At present it is the largest power station in Australia.

Located two miles south of Morwell and about 90 miles east of Melbourne, Hazelwood is the third power development of the State Electricity Commission on the brown coal fields of the La Trobe Valley. The station consists of eight 200,000 kW turbo-generators each having a single boiler burning brown coal supplied from a large open cut at Morwell. Together with the Yallourn and Morwell power stations, it produces more than 85 per cent of Victoria's annual electricity requirements.

The Hazelwood project was approved by the Victorian Parliament in 1959 as a 1,200,000 kW station to be built in three stages, each of 400,000 kW. The addition of a fourth 400,000 kW stage was authorised by Parliament in 1965. Initial site works for the station were begun towards the end of 1960 and the first boiler-generator unit was placed in service in 1964. The other seven units were installed at approximately yearly intervals until the project was completed early in 1971. The capital cost of the station was \$232m.

Each of Hazelwood's eight turbo-generators is designed to produce 1,400 million kWh of electricity annually. The machines, each approximately 100 ft in length and weighing approximately 750 tons, operate at a speed of 3,000 revolutions per minute and generate electricity at 16,500 volts.

The operation of the station is largely automated. From each of four unit control centres a group of two turbo-generators and their associated boilers are operated by remote supervisory control. There is also a main control centre which is designed to co-ordinate the operation of the four unit control centres and supervise the channelling of the station's electrical output into Victoria's transmission network.

The Hazelwood boilers are among the largest in the world designed for the combustion of raw brown coal. This low-grade fuel, with its high moisture content, necessitates much larger boiler plant than is required by black coal power stations to produce the same steam output. Each of the eight boilers is 200 ft high and has a single reinforced concrete chimney rising 450 ft above ground. At full load each boiler burns about 300 tons of brown coal an hour. The station's annual fuel consumption is 15 million tons.

Advances in power plant design and the use of brown coal which is not quite as wet as the coal from the original Yallourn open cut contribute largely to the station's generating efficiency. The coal consumption per kWh of electricity generated has been reduced to less than half the average rate of consumption in pre-war La Trobe Valley plant.

Coal for Hazelwood is delivered in a continuous flow by a belt conveyor system from dredgers operating at the coal faces in Morwell open cut to the station's main storage bunker, which has a capacity of 30,000 tons. From this main bunker other conveyor lines go out to feed smaller bunkers situated above each of the boilers.

Cooling water for the power station's steam condensers is drawn from a large artificial pondage, which was formed by damming a small tributary of the Morwell River. The pondage, with a surface area of approximately two square miles, holds 6,500 million gallons of constantly circulating water.

Power generated at Hazelwood is transmitted from the La Trobe Valley at 220 kV and 500 kV to Keilor and Rowville, two of the main transmission stations in the metropolitan area. These La Trobe Valley lines are linked into the main transmission grid to feed the State supply system.

Local country electricity undertakings

The operation of independent undertakings is governed by the *Electric Light and Power Act 1958*, which is administered by the State Electricity Commission. Under the Commission's rural electrification programme, the Mallacoota undertaking, the only remaining independent electricity undertaking in Victoria, is shortly to be acquired and absorbed into the State system.

The only other Victorian public supply not provided by the Commission is in the Bendoc area, which is served by the Monaro County Council in New South Wales. The number of consumers in the Mallacoota and Bendoc areas was 182 at 30 June 1971.

Gas industry

The gas industry in Victoria provides a reticulated gas supply to the Melbourne metropolitan area and to twenty-four centres throughout the State. In the year ended 30 June 1971 total gas sales increased by 32 per cent over the previous year.

At 30 June 1971 gas was supplied by the Gas and Fuel Corporation of Victoria, a public authority of the State, and one privately-owned public company, The Colonial Gas Association Ltd. Statistics for the industry for the year ended 30 June 1971 are set out in the following table :

VICTORIA—GAS STATISTICS, 1970-71

Undertaking	At 30 June 1971—		Sales 1970-71
	Mains	Consumers	
	miles	number	million therms
Gas and Fuel Corporation of Victoria (a)	5,805	496,200	181.9
The Colonial Gas Association Ltd	1,448	89,000	35.7
Total	7,253	585,200	217.6

(a) Includes sales during 1970-71 of former Gas Supply Company Ltd branches and the Geelong Gas Company.

On 12 August 1970 an agreement was executed between the Gas and Fuel Corporation of Victoria and The Gas Supply Company Ltd whereby the Corporation purchased all gas undertakings operated in Victoria by The Gas Supply Company Ltd. Legislation ratifying this agreement was passed by the Victorian Parliament in November 1970 and, as from 1 December 1970, the Corporation assumed responsibility for the operation of the Company's undertakings in Ararat, Bacchus Marsh, Ballarat, Colac, Hamilton, Portland, Stawell, Warracknabeal, Warrnambool, and Wodonga.

On 5 May 1971 the Gas and Fuel Corporation made an offer to purchase the shares of The Geelong Gas Company. This offer was subsequently accepted by over 90 per cent of the shareholders and control of the Company passed to the Corporation on 9 June 1971. The Company, which was incorporated by Act of Parliament in 1858, is at present operating under its own name as a subsidiary of the Corporation.

Gas and Fuel Corporation of Victoria

The Gas and Fuel Corporation of Victoria came into being by Act of Parliament in 1950. It was formed by the merger of the Metropolitan and Brighton Gas Companies which supplied gas to adjoining areas. The privately held shares in the two companies were exchanged for fully paid up preference shares in the Gas and Fuel Corporation and the State Government of Victoria invested \$8m which was held as ordinary shares in the Corporation. Three directors are appointed by the preference shareholders and the chairman and three other directors are appointed by the Government. The *Gas Franchises Act* 1970 gives the Corporation an exclusive franchise to supply reticulated gas in the Melbourne metropolitan area (excluding defined areas in the Footscray and Box Hill districts which are supplied by The Colonial Gas Association), in associated areas in Gippsland, on the Mornington Peninsula, and in the following other country centres : Ararat, Bacchus Marsh, Ballarat, Bendigo, Castlemaine, Colac, Hamilton, Kyneton, Maryborough, Portland, Stawell, Warracknabeal, Warrnambool, and Wodonga. At 30 June 1971 reticulated gas was supplied to all of these areas except Maryborough and Warracknabeal and also to Geelong, Maffra, Morwell, Sale, Trafalgar, Traralgon, and Warragul.

The Corporation was originally formed to make possible the use of the vast resources of brown coal in the La Trobe Valley for town gas production. Its duties include, among other things, the duty of encouraging and

promoting the use of gas and the task of advising the Government on the steps necessary to secure a safe, economical, and effective supply of gas in Victoria. The erection of a Lurgi high pressure gasification plant at Morwell commenced in 1951 and was completed in 1956. This plant, producing town gas from brown coal briquettes, made a significant contribution to the Corporation's total gas issues until 26 November 1969, when it was shut down as part of the programme of progressive phasing out of manufacturing plant with the introduction of natural gas.

Changes in raw material availability and parallel development of new gas making processes led to considerable diversification in the methods of gas production over the years. The Corporation progressively introduced new gasification processes making use of new feedstocks to achieve minimum production costs. This diversification is illustrated in the following table :

VICTORIA—GAS AND FUEL CORPORATION OF VICTORIA :
GAS MADE AND PURCHASED

Type of gas	1959-60		1968-69		1970-71	
	Million therms	Percentage of total	Million therms	Percentage of total	Million therms	Percentage of total
Brown coal gas (Lurgi)	20.4	27.5	36.7	31.3	..	..
Black coal gas	24.8	33.5	6.6	5.6	0.7	0.3
Water gas/Reformed gas	8.0	10.8	2.4	2.1	1.8	0.9
Oil gas	..	..	20.8	17.8	5.3	2.7
Refinery gases	20.9	28.2	45.4	38.7	10.9	5.6
Natural gas	..	..	5.2	4.5	177.0	90.5
Total gas issued	74.1	100.0	117.1	100.0	195.7	100.0

Victoria's natural gas supplies come from gas fields in the offshore Gippsland Basin. Construction of the 30 inch diameter high pressure (1,000 psig) transmission pipeline from Longford to Dandenong commenced in February 1968 and was completed in January 1969. Transmission from the Esso-Hematite joint venture treatment plant at Longford to the various markets in the State is the responsibility of the Gas and Fuel Corporation of Victoria.

A major feature of the Corporation's distribution system is a high pressure ring main operating at pressures up to 400 psig. This ring main consists of a 51 mile long, 18 inch diameter northern loop running between Dandenong, Doncaster, Keilor, North Melbourne, and West Melbourne, which is joined by a 22.6 mile, 30 inch diameter loop between Dandenong and West Melbourne. The northern loop was constructed and commissioned in sections. Construction commenced in October 1966 and was completed in October 1969. Construction of the 30 inch diameter section began in December 1968 and was completed in May 1970. This ring main, which cost \$11m, plays a vital part in supplying natural gas to the Corporation's 435,000 consumers in the metropolitan area. It will also transport natural gas across Melbourne for The Colonial Gas Association and onward supply to Geelong.

Natural gas was turned into the Corporation's metropolitan distribution

system on 31 March 1969 and, on 14 April 1969, the task of converting gas appliances owned by the Corporation's customers began. Conversion of 1,093,000 appliances in the premises of 445,000 consumers was completed on 22 December 1970.

On 7 December 1970 gas production in the metropolitan area ceased with the closure of the West Melbourne Works. These Works, which first produced gas in January 1856 and played a vital role in Melbourne's gas supply system for over a century, produced a total of 10.5 million therms of gas in the last financial year compared to a peak output of 55 million therms in 1967.

Construction of a 32 mile, 14 inch diameter high pressure (1,000 psig) pipeline from Brooklyn to Corio was completed in February 1971 and supply of natural gas to Geelong commenced on 15 March 1971. Conversion of consumers' appliances to burn natural gas was completed on 25 August 1971.

In May 1971 the Government approved a proposal by the Corporation to supply natural gas to Ballarat and Bendigo by the winter of 1973 and design of the necessary transmission system is now in progress.

Introduction of natural gas has resulted in reduced tariffs and substantially increased consumption by domestic, industrial, and commercial gas users. The widespread acceptance of natural gas by the community will lead to the gas industry playing an increasing role in the fuel economy of the State. At the same time, substitution of natural gas for other fuels will make a contribution towards the reduction of atmospheric pollution.

The Colonial Gas Association Ltd

The Colonial Gas Association Ltd was incorporated in 1888. It has a franchise to supply gas in the Footscray and Box Hill areas of Melbourne and in the country centres of Benalla, Horsham, Seymour, Shepparton, and Wangaratta. Until 1959 the Association's gas works operated using conventional carbonisation methods to produce gas from black coal imported from New South Wales. Between 1959 and 1963 its country undertakings were modified to operate on tempered liquefied petroleum gas and, at the same time, liquefied petroleum gas became a significant feedstock in its metropolitan gas undertakings.

The Association purchased its first supplies of natural gas from the Esso-Hematite joint venture on 5 May 1969 and immediately commenced the conversion of consumers' appliances in its area of supply in the eastern suburbs of Melbourne. This area was converted by November 1969 and the conversion operation then moved to the Association's franchise area in the western suburbs. The total operation, which involved the conversion of 177,200 appliances, was completed on 5 March 1970.

8

SOCIAL CONDITIONS

CULTURAL AND RECREATIONAL

Victorian Arts Centre

The Victorian Arts Centre is a major State project to provide a focal point for cultural activities in Victoria. The first unit of the Centre, the building for the National Gallery of Victoria situated in St Kilda Road and designed by Sir Roy Grounds, cost \$14m and was opened on 20 August 1968. The building provides space for the display of collections in each department and incorporates a concept of considerable value, both to scholars and the general public, in the provision of "study storage". This comprises reserve areas to which inquirers can gain access and where every object not on display is available for inspection.

The Gallery is provided with a hall of about 10,000 sq ft for temporary exhibitions of all kinds, a full-scale education department with areas for lectures, demonstrations, and practical work, and the Great Hall, an area designed for banquets, receptions, and State occasions, and with fine acoustic qualities for the performance of music. The Hall has a ceiling of carved, coloured glass designed by Leonard French.

The second stage of the project at the north end of the site is planned for completion in 1977. The Government of Victoria has approved the building of an underground complex to provide accommodation for the performing arts, at an estimated cost of \$22.8m, based on 1971 figures. It will include a theatre for opera and ballet to seat 1,800, a drama theatre for 750, and a flexible studio theatre designed for a variety of uses, including films, lectures, and experimental performances in all the arts. In addition to the theatres the complex will contain ancillary amenities for artists and for the public, of rehearsal areas, dressing rooms, concourses, foyers, and refreshment bars. Surmounting the theatres and set in an open landscaped area will be the 415 ft copper spire which has become recognised as the symbol of the Victorian Arts Centre. Not only will it act as a signpost to the theatres below, but it will also house in its base a restaurant, cafeteria, and administration areas. The Victorian Arts Centre Building Committee is planning for a third stage to complete the centre. This will consist of a 2,500 seat concert hall with its associated facilities for musicians and the public, and a number of meeting rooms for clubs and societies associated with the arts.

National Gallery of Victoria

The National Gallery of Victoria was founded in May 1861 when the

Governor, Sir Henry Barkly, declared open a small room in which were a number of plaster casts of classical sculpture and other objects which had been purchased a few years earlier in London. Thus, unlike most public galleries, this institution did not start with a collection of paintings, and it was not until 1864 that the first picture gallery was opened.

Bequests

The richness of the collections is in great part a tribute to a long tradition of public benefaction. The National Gallery of Victoria is unique in Australia in the number and range of its private benefactions. Such names as McAllan, Kent, Templeton, Connell, Felton, and Everard Studley Miller are among many who, by gifts of money and objects, have, to a large extent, created the Gallery. The most distinguished name in any such list is, of course, that of Alfred Felton, and the bequest which bears his name is indivisibly connected with the Gallery. This important bequest has, since 1905, made it possible for works of art of all kinds and all periods to a value of more than \$4.5m to be added to the collections. The departments of Painting, Sculpture, and Prints have been greatly enhanced by the Everard Studley Miller Bequest which is restricted to the acquisition of portraiture before 1800.

Recent acquisitions

Recently the National Gallery's collection of ancient Greek pottery was greatly strengthened by the acquisition of four new vases. Two important Berini trophies, both belonging to his middle period, were also secured. One is a gilt bronze of the Countess Matilda of Tuscany on a contemporary marble base. The second piece is a bronze bust of Cardinal Richelieu. "Tobit Burying the Dead", a drawing by the Italian painter Castiglione, was also acquired.

The Print Room collection has been enriched by a notable group of old master prints, including the now very rare "Christ and the Woman of Samaria" by Domenico Campagnola. A group of modern works contains Picasso's most famous etching, the "Repas Frugal", and Bonnard's lithographic series of "Some Aspects of the Life of Paris".

"Presentation Centre Piece" (1863) by the Hungarian-born Australian silversmith and jeweller, Ernest Leving, is a fine example of early Australian silversmith work and was acquired by the Gallery in March 1970.

A number of works have been added to the collections of Australian paintings including paintings by Sydney Ball, Jeffrey Bren, James Gleeson, and John Peust. "The Valley of MacDonald from the Road Beyond Wiseman's Ferry" by Conrad Masters (1801-1878) was purchased in 1970 and strengthens the Gallery's capacity to illustrate the work of this important pioneer artist. Recent acquisitions of Australian paintings and sculpture include generous presentations of works by Fred McCubbin, Roy Opie, John Brack, Peggy Shaw, Sir Bertram MacKennal, Robert Cremean, and Victor Roger.

Exhibitions

During 1970 the Gallery held a number of major exhibitions including the "Landfall" exhibition of Australian paintings, sculpture, and decorative arts to celebrate the visit of H. M. Queen Elizabeth II. Other exhibitions included recent acquisitions of the Felton Bequest and the Comalco

Sculpture Prize. The Gallery continued its policy of presenting the works of important Australian artists, including exhibitions of the works of Arthur Boyd and Sydney Nolan. The Gallery also organised several smaller exhibitions as part of its policy of presenting to the public a wide range of materials and artists.

National Gallery Society

The National Gallery Society, which has functioned since 1947, had a membership in December 1971 of 7,850. It offers a continuing programme of lectures, films, and other activities, including a programme of acquisition on behalf of the Gallery.

National Gallery Education Programme

The Education Section of the National Gallery of Victoria occupies 7,900 sq ft of floor space, 3.4 per cent of the total area of the building, and contains flexible teaching areas with audio-visual equipment. These are used for the lectures, discussions, and other forms of communication which provide introductory stimulus before students view the original works of art in the Gallery collection.

The section is staffed by the Chief Education Officer, who is a member of the Gallery staff, and by five full-time and six part-time education officers. These teachers have specialist art training and are seconded from the Education Department of Victoria. They cater for individual requests by teachers for study of particular areas of the collection as well as offering sessions especially planned to meet the needs and interests of varying age levels.

Each term an information folder is sent from the Education Section to the principal of every school in Victoria. Through it teachers are informed of arrangements for booking visits to the Gallery, of temporary exhibitions, and of special features of the education programme.

Primary, technical, and high schools as well as registered schools use these services and many of the students come from country centres throughout Victoria. Tertiary institutions such as teachers colleges and art schools are visiting the building much more frequently than in the past and business colleges and organisations training youth leaders, occupational therapists, etc., appreciate visits which cater for their general cultural interests. There has been a steady demand for sessions from teacher groups and educational organisations.

The education programme is available to teachers of all subjects, the Gallery collection providing many starting points for students of, for example, history, literature, social studies, biblical studies, home economics, and Asian studies, as well as of art and craft. Schools which are now developing individual courses for the first years of the secondary syllabus are making use of the Gallery in imaginative and experimental sessions.

Free admission is given for all school visits booked with the Education Office at least 48 hours in advance. At present education officers attend to between 1,200 and 1,500 students a week. A further 400 to 800 students come into the Gallery weekly to study with their own teachers. Groups staffed by education officers are divided so that one education officer works with no more than 25 to 30 children at a time.

In addition to the daily programme of school visits the Education Section is responsible for planning and staffing a travelling exhibition of works of art which visits country centres throughout the year. It also arranges vacation programmes, revision lectures for Higher School Certificate students, and exhibitions of special educational interest.

The wide range of students (from primary to tertiary) and the variety of sessions offered call for considerable versatility on the part of the education staff whose overall aim is to evoke the maximum response from a direct encounter with original works of art.

National Gallery Art School

The Art School of the National Gallery of Victoria was founded in 1868 and is the oldest art school in Victoria. Its function is to provide training for young people who wish to become professional painters, sculptors, or printmakers. It is governed by the Trustees of the National Gallery and is situated in the Russell Grimwade garden at the rear of the National Gallery building.

Each member of the staff is a practising artist. The first head of the school was the landscape painter Eugene von Guerard, and his successors, all artists of distinction, have included G. F. Folingsby, Fred McCubbin, and Bernard Hall (the last to combine the responsibilities with those of Director of the National Gallery).

During the past century many now famous artists have passed through the school as students. Tom Roberts, Sir Arthur Streeton, Sir John Longstaff, Max Meldrum, Hugh Ramsay, George Bell, James Quinn, Constance Stokes, Lawrence Daws, Fred Williams, and John Perceval are among these.

In 1870 the school enrolled forty-one students. In 1970 the number was seventy, a limit dictated by a concern to preserve the best traditions of the school—a studio atmosphere and a close personal collaboration between masters and students. Two levels of study are offered: the Associate Diploma with specialisation in painting, sculpture, or printmaking is a three year full-time course begun at the completion of secondary education, while the Master Diploma is a two year full-time course for students who have reached Associate Diploma standards. Commonwealth Advanced Education Scholarships are tenable at the school; there are a small number of privately maintained scholarships and several prizes are awarded annually. At two year intervals students may compete for a valuable travelling scholarship which supports a further two years of study and travel.

In March 1970 the school moved from its original home in the State Library and Museum building to its new premises at the Arts Centre, St Kilda Road. The new school is a striking triangular building of two floors, the upper being a single large studio area for painting and the lower comprising sculpture, drawing, and printing studios, an assembly and exhibition auditorium, and a library. A cafeteria adjoins the school as does a pleasant walled courtyard reserved for student recreation and outdoor work. The school enjoys a special advantage in its intimate association with the collections and services of the National Gallery. It attracts students from all States of Australia and from New Zealand, Asia, the U.S.A., and

Europe. However, its primary aim is still to discover talented young Victorians and to provide them with the encouragement, education, and facilities they need to develop their creative powers and make a full contribution to the cultural life of their community.

Further references, 1963-1971

Sovereign Hill, Ballarat

Ballarat holds a unique place in Victorian, and indeed Australian, history. To create a worthy memorial to this history in a practical and living form, the Ballarat Historical Park Association sponsored its project "Sovereign Hill". The discovery of gold in 1851 near Sovereign Hill was one of the most formative causes in the growth of the State. For this reason the historical memorial was built on the actual site which derived its name from the Sovereign Quartz Mining Company. In 1868 this company pioneered deep quartz mining in Ballarat, and the immediate area of the Park produced more than 12 tons of gold.

On 29 November 1970 the Premier of Victoria officially opened "Sovereign Hill" before an audience of some 12,000 people, and on the same day Sir Maurice Mawby opened "the Diggings". In the first three months of operation over 100,000 visitors inspected the project.

Although there is much building yet to be completed in the village street, visitors already have been able to see the alluvial diggings, complete with every type of shaft originally used. Visitors are also able to seek gold in the Red Hill Gully Creek, using both the dish and cradle. A working horse-powered whip, puddling machine, and whim are features of technical interest and souvenir "gold licences" can be obtained from a Gold Commissioners' tent.

The quartz mining area was partially completed in 1971 and includes the poppet head over the main shaft, an engine house, a battery shed, and a blacksmith shop. The winding and crushing equipment housed in these buildings is under restoration, and is planned to be in working order soon. A tunnel is being driven in from the base of the hill to a shaft under the poppet head which will be arranged as a museum of quartz mining, with drives set up in diorama form depicting in every detail the work of the miners.

In the village street are the blacksmith's shop, the Cobb and Co. office and livery stables, the Times newspaper office, the Colonial Bank of Australasia, the Gold Office, the miner's cottage, the fire station, and the Chinese joss house. Planned for construction over the next three or four years are about two dozen other buildings which will complete a typical section of old Main Road. Those which were completed in 1971 included the New York Bakery and Tea Rooms, the tinsmith's shop, estate agent's office, and pottery. Others to be erected are the mine boiler house with its massive brick chimney, hotel, theatre, restaurant, and the museum building which will house the collection of the Ballarat Historical Society.

Library services

Library services in Victoria are provided by the State Library of Victoria, and by free municipal or public libraries in some 170 municipalities in the State.

State Library of Victoria

In the early 1850s some influential citizens, pressing the Government to provide for the literary and educational needs of the community, found Lieutenant-Governor La Trobe both sympathetic and helpful. An area of two acres was reserved for the library, and a sum of £6,500 placed on the Estimates for the erection of a building and for the purchase of books. This amount was passed in the Appropriation Act signed on 20 January 1853. On 20 July in the same year five trustees were appointed, with Mr Justice (later Sir Redmond) Barry as chairman. The foundation stone was laid on 3 July 1854 and the Library opened on 11 February 1856.

By 1900 it was evident that a larger building was necessary, and in March 1905 the Librarian recommended that the most fitting way to celebrate the jubilee of the institution would be to erect a new building. On 14 November 1913 the great central octagonal reading room, with its associated book stacks, was opened. A further step was taken in March 1965, when the La Trobe wing, which holds the State's Australiana collection, was opened to the public.

The Library was first known as the Melbourne Public Library, later as the Public Library of Victoria, and from 1960 as the State Library of Victoria. It is a branch of the Chief Secretary's Department.

The Reference Library is the basic research library for the State. For the first hundred years of its existence it built up strong collections in a wide range of subjects but recently it has been necessary to limit the areas in which collecting is done in depth. Among fields of continuing interest are historical bibliography, with early printed books and private presses of the nineteenth and twentieth centuries; fine arts, including painting, sculpture, and the decorative arts with emphasis on Oriental art; music, both literature and scores; history and typography, especially British; military history including the First World War; and biography, together with genealogy and parish registers.

The principal fields which were formerly developed but not maintained extensively, and in which the Library has outstanding nineteenth century collections, are religion, engineering, and pure science. Files of newspapers and government publications from Australia, the United Kingdom, the United States of America, New Zealand, and Canada are maintained. Representative international organisations such as the United Nations Organization deposit all important papers in the Library.

The Lending Branch was opened to the public in 1892. In 1920 the regulations were amended to allow the dispatch of books to persons living in country areas. During 1970 the Library Council of Victoria decided to close the Metropolitan Section of the Lending Library on 1 March 1971. The increasing number of municipal libraries being established in the metropolitan area had caused a gradual decline in the use made of the Lending Library. In place of the metropolitan lending service, a Municipal Support Service has been established, through which existing stock and future accessions will be made available to all readers through their local municipal libraries. A bibliographical and information service is also provided to the municipal libraries.

With the expansion of libraries throughout Victoria following the passing of the Free Library Service Board Act in 1946, the trustees

established a Library School to remedy the critical staff shortage which had developed. From 1948 onwards, students were prepared in the School for the Registration Examination of the Library Association of Australia.

During 1970 it was decided to phase out professional education from the Library Training School. Education for librarianship has been taken up by colleges of advanced education and universities, and with developments in these institutions, especially at the Royal Melbourne Institute of Technology, it is no longer necessary for the Library School to give lectures in basic librarianship. Instead, the Library Training School concentrates on in-service training and the organisation of advanced courses, seminars, and conferences to ensure the continuing education of Victorian librarians. The last intake of first year Registration Certificate students took place in 1970.

Victoriana in the State Library

The La Trobe collection includes the Australian, New Zealand, and Pacific material held by the Library. This collection is especially strong in material relating to Victoria. The depth of the Victorian collections is due principally to the legal provision since 1869 for deposit in the State Library of a copy of every work published in Victoria. The many thousands of books, government publications, periodicals, newspapers, pamphlets, and maps accumulated through this provision have been supplemented by important early Victorian material relating to the discovery, exploration, and early settlement of the State, and of works about Victoria or written by Victorians and published elsewhere.

The La Trobe collection contains approximately 20,000 volumes of newspapers, nearly all Victorian, supplemented by indexes and collections of press cuttings, and many thousands of manuscripts, including documents from Batman, the Port Phillip Association, Wedge, Bourke, Fawkner, Burke and Wills, Henty, McKinnon, Armytage, Shillinglaw, Coppin, Black, McCulloch, La Trobe, Redmond Barry, and Turner. The collection also includes 30,000 pictures and objects of historical interest, including paintings by Gill, Russell, von Guerard, Liardet, Strutt, and Burn; engravings by Ham, Thomas, Cogne, and Calvert; and photographs by Fauchery, Caire, Lindt, and Nettleton. There are also approximately 10,000 maps.

Material dealing with the history of the State is supplemented by virtually complete collections of the State's technical and scientific publications (including those of the Royal Society of Victoria and kindred societies as well as those of government departments), complete sets of law reports, and of Parliamentary papers and other political material.

State Archives

The Archives Division of the State Library is responsible for government departmental and semi-government records of the State, many of which are housed in the La Trobe Library. From 1893, when the office books of the Melbourne agency of the Derwent Bank were deposited at the State Library, until 1910, there were desultory collections of source material. In 1910 the Premier received a deputation from the Historical Society of Victoria and plans began to be made for the preservation of State documents.

The idea of an Archives Department together with the historical collection was mooted in 1914, and in 1917 a Royal Commission on the

public services called attention to the "great space occupied in storage rooms of the Public Offices by obsolete documents". Two years later a deputation to the Chief Secretary from the trustees of the Public Library and the Historical Society of Victoria requested that certain records be handed over to trustees pending the establishment of a public records office ; but with the exception of the Chief Secretary's records from 1836 to 1870, no large allocation was made. In 1927 a Board of Inquiry into methods in the Public Service drew attention to the keeping of official records by the department, and made recommendations relating to uniform methods of registration of records and correspondence.

In 1928, as a result of agitation against the destruction of records, a Premier's instruction was issued that no records be destroyed before first being offered to the trustees of the Public Library for inclusion in the Archives. This instruction was repeated several times after that date. Indiscriminate war-time pulping of historically valuable documents led to a request in 1941 by the History School of the University of Melbourne, the Historical Society of Victoria, and the Library Trustees for the appointment of a full-time Archivist. This appointment was made in 1948, and in 1955 the Archives Division was created.

Municipal library services

The modern movement in municipal library service dates from the inception of the Free Library Service Board in 1947. Under the *Library Council of Victoria Act 1965*, the control of the Board passed to the Library Council of Victoria, and its office is now known as the Public Libraries Division of the Library Council.

In 1970-71, 169 councils, representing 3,130,671 Victorians, shared government library grants amounting to \$1.6m. Of this amount, \$1.5m was direct municipal library subsidy. With the addition of expenditure from these councils' own funds, expenditure on municipal library services for 1970-71 was over \$4.5m, an average expenditure of approximately \$1.43 per head of the population served. In 1969-70, 941,000 borrowers used the services, totalling 3,000,513 books, to the extent of 16,387,884 issues.

Regional libraries, of which there are twenty-five at present, comprising a total of 108 councils, consist of groups of councils which pool their resources, book-stocks, and trained staff. Since 1962, six metropolitan regional library services have been formed. The Victorian Government provides a rural library establishment and regional library development grant of \$100,000 per annum. There are fourteen bookmobile services operating in Victoria, eleven in country regions, and three in the metropolitan area.

Library Council of Victoria

In 1963 the Governor in Council appointed a Board of Inquiry to assess the library situation in Victoria, and to make recommendations for future development. In August 1964 the Board of Inquiry presented a comprehensive report on all phases of library work in the State with a list of recommendations for improvement and development of libraries. One in particular was that the State Library Trustees and the Free Library Service Board should be replaced by a single authority.

In 1965 Parliament enacted the Library Council of Victoria Act, the principal object of which was to constitute the Library Council of Victoria consisting of a president and eight members, appointed by the Governor in Council. The Act provided that the first president of the Council should be the Chief Justice of Victoria. The Act also stated that of the eight other members, six should meet certain qualifications, namely, one should be a person holding a senior academic position in a university in Victoria; one should be a person distinguished in the field of commercial or industrial administration; one should be a person distinguished in the field of education; one member would represent municipalities within the metropolis defined under the Act; another the municipalities outside the metropolis; and one of the members should be a professional librarian appointed from a panel of names submitted by the Victorian Branch of the Library Association of Australia.

The principal functions of the Council are to manage and control the State Library; to assist in the promotion, organisation and supervision of the Free Library Services (including children's libraries); to advise on matters of general policy relating to free libraries; to make recommendations to the Minister on the allocation of moneys made available by Parliament to assist free libraries; to provide advisory services to free libraries and to associated institutions; and to manage and control the preservation of public records.

The Council was duly constituted on 13 April 1966, and since that date has managed the State Library of Victoria and has advised the State Government on the promotion of public library services throughout the State.

AACOBS Victorian Regional Committee

When the Melbourne Public Library was founded, its Trustees attempted to collect material in depth in all fields of knowledge, and to establish as far as possible a complete record of human thought and action. This policy was followed with considerable success well into the twentieth century.

Because of the rapid increase in the number of books and periodicals published in this century, it is no longer possible for any library to pursue such all-embracing objectives, and no library can any longer be self-sufficient in its resources. It becomes expedient, therefore, for libraries to share their resources with each other, and this has led to the development in the mid-twentieth century of new co-operative patterns of acquisition, recording, and use of books.

In 1956 through the action of the National and State Librarians, a planning body called the Australian Advisory Committee on Bibliographical Services (AACOBS) was set up to consider measures for the co-operative development of the book resources of Australia. In 1965 committees were set up in each State to co-ordinate acquisition in their areas, to organise and improve existing resources by co-operative projects, and generally to promote co-operation amongst libraries of all types.

The AACOBS Victorian Regional Committee consists of the State Librarian, the librarians of the university libraries, the C.S.I.R.O. network of libraries, the Parliamentary Library, and representatives of tertiary college libraries, local public libraries, and special libraries.

Through regular meetings of this Committee and of groups responsible to it, weaknesses in existing book provision are being identified and the economical use of library money is being promoted through the avoidance of unnecessary duplication of resources. Libraries are thus being enabled to develop special strengths in their collections in co-ordination with other libraries but without loss of autonomy.

Further references, 1961-71; Royal Society of Victoria, 1963; Drama, 1963; Special and research libraries, 1964; Painting in Victoria, 1964; Sculpture in Victoria, 1964; State Film Centre, 1964; Regional libraries, 1965; Book publishing, 1965; Music, 1965; La Trobe Library, 1966; Board of Inquiry into Library Services, 1966; Manuscript collection in La Trobe Library, 1967; Public records in Victoria, 1968; Drama, opera, and ballet, 1968; Art Library, 1969; Swan Hill Folk Museum, 1971

Science Museum of Victoria

The Science Museum of Victoria (formerly the Institute of Applied Science), which commenced operations on 8 September 1870 as the Industrial and Technological Museum, entered a new phase of its history following the formal separation of the National Gallery of Victoria from the group of four branches housed on the Swanston Street block. The consequent availability of some 58,000 sq ft for allocation to the State Library, National Museum, and Science Museum made possible some easing of the acute problems of accommodation which had beset all branches for many years.

After an examination of the relative needs of the three remaining branches, the Museum was allocated all the old National Gallery area except the Stawell, La Trobe, and McAllan Galleries, and its existing main areas (Queen's Hall and North West Wing) were allocated to the State Library. These decisions involve the transfer of virtually all displays, preparation facilities, and offices to new locations. This transfer will take some years to complete. As the display area will be more than doubled, a large number of new displays will be created, and the opportunity to modernise old displays before re-establishing them is being fully exploited. In the meantime, temporary displays in the new areas are available to visitors.

The Museum presents displays on applied aspects of all the sciences, including engineering, physics, chemistry, geology, and biology (the latter including public health). Exhibits are continuously reviewed as scientific knowledge progresses, and an endeavour is made to include the historical background of any subject. The H. V. McKay Planetarium continues as a soundly established and popular service. Aids are provided specifically for school parties by the Museum and the Education Department. Four teachers are currently seconded for this service. Plans are being developed for a comprehensive education centre in the George Swinburne gallery basement.

Other important services include a radiocarbon dating laboratory and the observatory. The latter is used for telescope viewing by visitors with the assistance of demonstrators from the Astronomical Society of Victoria. This service has now been running continuously for 23 years, and some 34,600 persons have been given the experience of direct viewing of the night sky through high performance instruments. Combining this service with the planetarium, the Museum is filling a role in meeting the demand for education in astronomy, a demand which grows with the progress of space research.

The professional staff is always available to deal with inquiries by visitors and correspondents. These inquiries range over a multitude of subjects, and information not always readily available from other sources is supplied to many persons each year.

Further reference, 1971

National Museum of Victoria

The National Museum now operates under a new Act passed in 1970. The Trustees have been made into a body corporate called the National Museum of Victoria Council. Their functions are "to manage and control the National Museum as a natural history museum." The first of eleven functions defined for the Museum is "to collect . . . zoological, geological, ethnological and anthropological specimens for study, research, display, and educational purposes." In keeping with developments throughout the world, the research and education functions are given a more definite place in the aims of the institution, without reducing traditional activities. The Museum is a branch of the Chief Secretary's Department. It was founded in 1854 and has been on its present site since 1899.

In 1968 the National Gallery of Victoria moved from the city block in which the Museum is accommodated to its new building in South Melbourne. As a result two new exhibition halls were developed, namely, the Stawell Hall to accommodate some of the Museum's classic Aboriginal bark paintings and the North Rotunda to accommodate a series of new exhibits on the Aboriginal way of life, the only surviving palaeolithic culture. The entire Lower McAllan Hall has been devoted to palaeontological storage and the Middle McAllan Hall to offices and a design studio. The valuable Anthropological Collection, once accommodated in various parts of the building, has been brought together in modern steel storage in the La Trobe Hall.

Large numbers of children in the halls now characterise the Museum as a result of the rapid development of the educational service. In 1970 some 43,000 children visited the Museum in classes and the majority of these received lessons. A wide range of natural history teaching aids is available for loan to schools.

The Government of Victoria has provided money for a feasibility study on a new museum building. The former Observatory site of over 6 acres between the Shrine of Remembrance and Government House was reserved in 1948 as the site for a new natural history museum. The new study shows that a building can be erected on this site to provide all the services required of a museum in a modern, large city. The space available would allow the maintenance of a parkland setting and the provision of adequate parking space, so as to allow greater facility for citizens to visit their Museum, and for the increasing numbers of school children attending the institution.

Developments in the sciences of genetics, ecology, and conservation call for larger numbers of specimens to be held in a museum, in order to permit the modern population-type study of each species. This places a great strain on storage and the organisation of data so that it can be retrieved as required. Much work has been done to update the storage of the National Museum, but space is the chief problem.

In addition to a director and deputy director, the staff of the Museum consists of seven curators, two assistant curators, ten technical assistants, six display and preparation personnel, and a librarian, as well as persons who provide supporting services of various kinds. A large library of scientific publications and periodicals is maintained. The *Memoirs of the National Museum of Victoria* are published annually, and contain research papers produced by museum staff and honoraries. With the assistance of the Ian Potter Foundation a special volume was published on the geology and archaeology of the Green Gully site near Keilor. With the assistance of the William Buckland, Nuffield, and Sunshine Foundations a four year research programme was carried out on the Murray River Valley between Mildura and Renmark when it was anticipated that a dam would flood 500 square miles of this little-known country.

National Trust of Australia (Victoria)

The rapid post-war development in Victoria emphasised the need to minimise the unnecessary destruction of buildings, objects, and sites of architectural, historic, or scenic importance. The development of the National Trust movement overseas and elsewhere in Australia provided a precedent, and during 1955 and 1956 groups of interested individuals met together with this in mind, their efforts leading to the formation of the National Trust of Australia (Victoria).

The principal aims of the Trust can be summarised as follows:

1. to educate the public and stimulate interest in places and things which are of national or local importance because of educational, historic, architectural, traditional, legendary, artistic, literary, scientific, antiquarian, or archaeological reasons, including places of natural beauty and their flora and fauna ; and
2. to acquire, maintain, and manage suitable buildings, objects, or sites for the purpose of their preservation.

Following the inaugural meeting in September 1956 public interest increased rapidly, particularly after "Como" in South Yarra was acquired for the nation. Some \$285,000 has already been outlaid on this project which now attracts about 100,000 visitors annually.

The growth of the Trust in Victoria has been rapid. Membership rose from 475 in June 1959 to 7,969 in November 1970. Originally, the Trust Council was the sole Committee ; today some forty-five honorary committees and sub-committees, as well as many honorary expert advisers assist and guide the Trust in its work. It now has branches covering most areas of the State.

In addition to "Como", the Trust has restored (and opened to the public) La Trobe's Cottage (the State's first Government House), the Beechworth Powder Magazine, and "Lake View" at Chiltern (a memorial to Henry Handel Richardson). It has also opened a Carriage Museum at Beechworth, the McCrae Homestead near Dromana, and the original three-tiered cell block of the Old Melbourne Gaol. Other Trust properties in the process of restoration for the public to see include the Castlemaine Market, the Bendigo Joss House, the Ebenezer Mission Station, the Portarlington Mill, "Barwon Grange", Geelong, and important pre-fabricated iron houses in Gippsland and Melbourne. The Trust ranges far and wide in its endeavours to preserve the best of the past for the



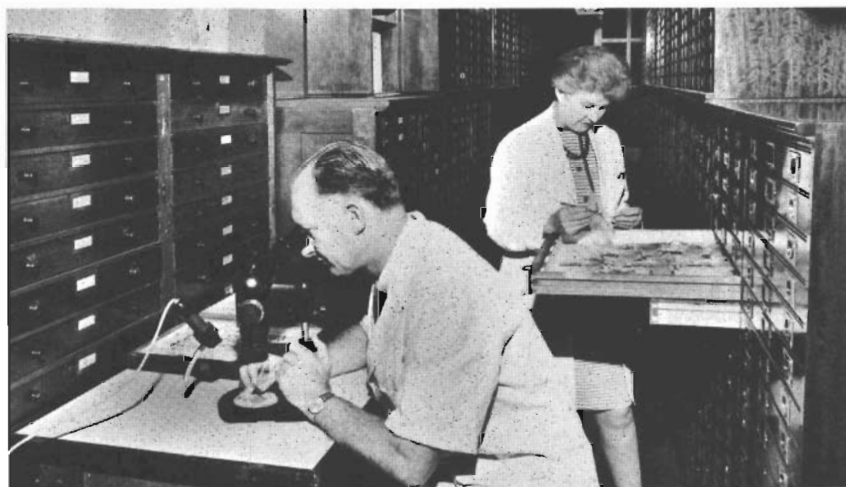
Students at work in the television studio at the Swinburne College of Technology, which has the only film and television school of its type in Australia.

The Herald and Weekly Times Ltd

The multi-purpose Dallas Brooks Hall in the Masonic Centre at East Melbourne.

Masonic Centre





Children visiting the National Museum study a baby kangaroo under the guidance of an education officer (top). A display officer works on a diorama of emus and their young (centre). The Curator of Insects carries out research while his assistant cares for the extensive collection (bottom).

National Museum of Victoria

present and future generations. Other Trust-owned preservations include the land boom mansion "Illawarra", the Old Heidelberg Police Station, the Wollaston Bridge, the Nareeb Gates now in the Domain, the Hepburn Graves, significant statuary from the old ANZ Bank at 351 Collins Street, the paddle steamer *Adelaide*, the sailing ship *Polly Woodside*, and the Black Springs Bakery near Beechworth. A notable landscape preservation in 1970 was the purchase of Mount Sugarloaf, at Camperdown, to save it from destruction by quarrying. During 1969 the Trust was bequeathed an important classified mansion, "Barwon Park", at Winchelsea (subject to a life interest), together with its surrounding 319 acres of land.

The work of the Trust has also stimulated preservation throughout the State—by private individuals (a notable example being "Emu Bottom" at Sunbury), local government (the old Bank of New South Wales building at Kyneton, for example), and by the State and Commonwealth Governments, examples being the Royal Mint main building and the Old Customs House, respectively. All this has greatly enhanced interest in Victoria's history. The Trust has produced a major publication, *Historic Buildings of Victoria*, and is co-operating with the Australian Council of National Trusts in producing a book series, *Historic Buildings of Australia*.

Buildings, etc., classified by the Trust rose from 1,416 in 1968 to 1,694 in 1970. No "A" classifications were awarded during 1969-70, but a number of "B" classifications were given. These included churches (St Jude's, Carlton and the Independent Church, Melbourne); homesteads and fine houses ("Blairgowrie" near Sorrento, "Coonanga" near Strathmerton, "Adelaide Vale" at Fosterville, and "Kardina" at Geelong—upgraded from "C"); public buildings (Police Magazine at Avoca, Public Health Department Building, formerly Old Telegraph Station, at Geelong—upgraded from "C", the Railway Station and Water Tank at Lal Lal, and certain buildings at the Quarantine Station at Portsea). Terraces were also classified ("Tasma Terrace", East Melbourne and "Blanche Terrace", Fitzroy), a hotel (the "Criterion" at Sale), and a warehouse ("Blight's Warehouse", Melbourne). Humble structures were also included, "B" classifications being awarded to an early cottage at No. 3 Cox's Gardens, Williamstown, a pre-fabricated iron house at 40 Moor Street, Fitzroy (since removed for preservation), and a bark hut in the grounds of "Angahook" at Airey's Inlet. Newman College, although a building of the twentieth century, was awarded a "B" classification because it had been designed by Walter Burley Griffin.

As the Trust's assets increase so do its financial responsibilities. The Government has given an annual grant of \$12,000 for administrative expenses. Administration costs, however, have risen; for the year ended 30 June 1970 they were \$48,055. The Trust's income is derived entirely from membership subscriptions, donations, and fund raising by various committees. In June 1971 the Government announced a capital grant of \$250,000 to the National Trust over the next five years, on the basis of \$2 for each \$1 raised by the Trust.

Generally speaking, government and local government are well aware now of the need for historic preservation, as are most private owners. The Trust is assisted by various historical and other societies, local citizen groups, and public opinion generally, and the various press media are also contributing to greater awareness of the Trust's fundamental objectives.

Further reference, 1971; Sidney Myer Music Bowl, 1970

Metropolitan press

1970

During 1970 the average daily sale of Melbourne's three established daily newspapers (*The Age*, *The Herald*, and *The Sun News-Pictorial*) increased to more than 1,341,000 copies per day. This figure does not include approximately 60,000 sales per day of *Newsday*, the evening newspaper which was published between 30 September 1969 and 2 May 1970.

The retail price of *The Age* was increased to 6 cents on 31 August. The other morning newspaper, *The Sun News-Pictorial*, remained at 5 cents while *The Herald*, the evening newspaper, continues to sell at 4 cents.

The biggest news event of the year was the West Gate Bridge disaster. Newspaper sales soared—*The Herald* achieved a record daily average sale of 531,195 copies for the week during this period. *The Sun News-Pictorial* also created a record when it averaged 658,935 copies per day during Cup Week. The circulations of *The Sun* and *The Herald* continue to be the highest of morning and evening newspapers, respectively, in Australia. They are also cheaper than most daily newspapers in other States, most of which retail at 7 cents per copy.

The State is also served by *The Australian Financial Review*, the national business and financial newspaper, printed and published in Melbourne on Monday to Friday and carrying, in addition to the main news of the day, the previous day's stock market trading from all capital cities and New Zealand.

Competition in Sunday newspapers has increased. Nationwide News now publish their national daily *The Australian* on Sundays (the first issue on 28 February 1971) as *The Sunday Australian* thus joining the *Melbourne Observer* and the *Sunday Review*. The *Sunday Observer* ceased publication on 7 March 1971. The new national weekly newspaper *The National Times* is also available in Melbourne on Sundays and from Mondays onwards elsewhere in Victoria.

The total advertising volume in Melbourne dailies increased over the year by 6 per cent. The increases were evenly divided between display advertising and classified advertising. There was a noticeable reduction in classified advertising volume during the second half of the year because credit became more difficult to obtain. The general retail market remained extremely competitive, particularly with the major store groups, and the year was noticeable for a substantial increase in the number of individual promotions carried out by department stores and food groups. Advertising from real estate agencies and developers also declined during the second half of the year, again for similar economic reasons. However, this did not affect advertising for used cars to the same degree. Advertisers continue to increase their usage of pre-print colour, which increased by 60 per cent in *The Herald*.

1971

During 1971 the average daily sale of Melbourne's three established daily newspapers rose to more than 1,350,000 copies per day.

The Sun News-Pictorial increased its retail price to 6 cents on 1 November to join *The Age* already retailing at that price. *The Herald* continued to sell at 4 cents. *The Sun* achieved an Australian Bureau

of Circulation figure of 651,190 daily average sale for the six month period to the end of September, *The Herald* 505,471, and *The Age* 193,943.

Competition amongst Sunday newspapers remained keen. No one publisher held a large share of the market. The *Melbourne Observer* and *Sunday Review* continued to vie with Sydney Sunday newspapers for the readers' interest.

Total advertising volume in Melbourne dailies decreased over the year by seven per cent. The major loss occurred with classified advertising, down 8.5 per cent due to the slackening in demand for employment. Retail advertising was buoyant and volume satisfactorily maintained. However, manufacturers reduced expenditure on advertising and fewer new products were offered to the public. Advertising for new and used cars and property development was substantially ahead of the previous year.

Suburban press

Most Melbourne suburban newspapers now employ larger editorial staffs than ever before, whose services are more skilfully applied to achieve the fullest possible coverage of local news and happenings. Conforming with the modern trend, the bigger newspapers also are freely illustrated. The growth of the suburban press has been supported by local advertisers and the public.

These changes in suburban press publishing began in 1960 with the opening of the first of a series of suburban regional shopping centres. These centres have had the effect of decentralising the Melbourne retail industry, and have created a demand for well produced local newspapers. Even before that date expanding populations in the post-war period and the development of new outer suburbs contributed to these changes. Some suburban newspaper companies, in consequence, prospered by producing new papers to serve new communities. The companies have aimed to achieve the highest possible circulation and service to the advertiser, even though most are distributed free.

By 1970 only 22,500 of the 1,093,370 suburban newspapers published in Melbourne each week represented paid circulation, and of the total, 719,674 were audited by the Suburban Newspapers' Audit Bureau, an independent organisation established to endorse effective door-to-door distribution by its own field investigations. There are forty-one different publications. Newspapers affiliated with the Bureau publish their audited circulation figure each week. At least one group has a total weekly circulation exceeding 300,000.

For some years the Suburban Newspapers' Association has organised a series of competitions to encourage staffs to maintain the improved standard of newspapers. Annual awards are presented to the newspapers judged to be outstanding in the respective fields of competition. Suburban newspaper companies now operate efficient high-speed printing and picture processing plants, and their methods are up to date.

Further references, 1967-1971; *The press*, 1961-1966; *Country press*, 1967

Broadcasting

Australian Broadcasting Control Board

The Board is responsible for the planning of broadcasting and television services. It is constituted under the *Broadcasting and Television Act*

1942–1971, and operates under the Ministerial jurisdiction of the Postmaster-General.

The Board consists of five members, including two part-time members. Its functions are generally as described on pages 177–8 of the *Victorian Year Book* 1964.

The Act requires the Board to consult representatives of commercial broadcasting stations and commercial television stations in exercising its powers and functions in relation to those stations.

Australian Broadcasting Commission

The Australian Broadcasting Commission in Victoria broadcasts from 3LO and 3AR Melbourne, 3GI Sale, 3WL Warrnambool, and 3WV Horsham. There are two domestic short wave stations, VLH and VLR, operating from Lyndhurst and covering northern Australia; and seven short wave transmitters operating from Shepparton and two from Lyndhurst for Radio Australia, the A.B.C.'s overseas service.

The A.B.C. radio service operates under the *Broadcasting and Television Act* 1942–1971. A.B.C. programmes cover a wide range, such as news, drama and features, current affairs, rural programmes, plays, operas, and music, including concerts by overseas artists, and orchestral music. Programmes also cater for children, variety entertainment, religion, and sport.

Commercial broadcasting

Commercial broadcasting stations are operated by companies under licences granted by the Postmaster-General. They rely for their income on the broadcasting of advertisements.

The fee for a licence for a commercial broadcasting station is \$50 plus an amount based on the gross earnings from advertising receipts during the preceding financial year, assessed on a sliding scale varying from 1 per cent for amounts up to \$1m to 4 per cent on amounts over \$4m. In 1970–71 Australian licensees paid \$378,333 in licence fees, the fees for Victoria being \$98,001 of which \$73,033 was on behalf of metropolitan stations.

At 30 June 1971 there were 116 commercial broadcasting stations in operation in Australia. Twenty of these were in Victoria, six in Melbourne and fourteen in country districts; the call signs and locations of these are shown in the following table :

VICTORIA—COMMERCIAL BROADCASTING STATIONS IN OPERATION
AT 30 JUNE 1971

Call sign	Location	Call sign	Location	Call sign	Location	Call sign	Location
3AK	Melbourne	3XY	Melbourne	3GL	Geelong	3SH	Swan Hill
3AW		3BA	Ballarat	3HA	Hamilton	3SR	Shepparton
3DB		3BO	Bendigo	3LK	Lubeck	3TR	Sale
3KZ		3CS	Colac	3MA	Mildura	3UL	Warragul
3UZ		3CV	Maryborough	3NE	Wangaratta	3YB	Warrnambool

At 30 June 1971 the average weekly hours of operation of Victorian commercial broadcasting stations were Melbourne 168 and country 134.

History of broadcasting, 1961; Radio Australia, 1966; Educational broadcasts to schools, 1968; Development of A.B.C. radio programmes, 1969

Television

Australian Broadcasting Control Board

The responsibilities and functions of the Australian Broadcasting Control Board with regard to television are similar to those of broadcasting.

Under the provisions of the *Broadcasting and Television Act* 1942-1971, the Australian Broadcasting Control Board is responsible for the determination of the sites, operating powers, and frequencies of all television stations, both national and commercial. The Board is also responsible for ensuring that the technical equipment of television stations is in accordance with standards and practices considered by the Board to be appropriate. The Australian Post Office is responsible for the provision and operation of the transmitters for the national broadcasting service, while the Australian Broadcasting Commission is responsible for the provision and operation of the studios. The establishment of the commercial television stations is the responsibility of the respective commercial licensees, subject to the general requirements of the Board.

At 30 June 1971 television services were provided in Australia by 48 national stations and 46 commercial stations, of which one national station and three commercial stations were in Melbourne, and seven national stations and six commercial stations were in Victorian country areas. A service is now available to over 95 per cent of the population.

Television translator stations

A television translator station is normally a low-powered device designed to receive the signals of a parent station and re-transmit them on a different frequency. It does not originate programmes. The principal use of a translator is to improve service to fringe areas and to areas which, for reasons of topography, do not receive an adequate service from stations in their area.

Details of translator stations in operation in Victoria are as follows :

Area served	Parent station	Channel	Date of commencement
COMMERCIAL STATIONS			
Warrnambool-Port Fairy	BTV6 Ballarat	9	June 1966
Swan Hill	BCV8 Bendigo	11	May 1967
Portland	BTV6 Ballarat	11	July 1968
Alexandra	GMV6 Goulburn Valley	10	October 1968
Eildon	GMV6 Goulburn Valley	3	August 1969
Myrtleford	AMV4 Upper Murray	9	December 1969
Nhill	BTV6 Ballarat	7	October 1970
NATIONAL STATIONS			
Warrnambool-Port Fairy	ABRV3 Ballarat	2	October 1966
Portland	ABRV3 Ballarat	4	May 1968
Alexandra	ABGV3 Goulburn Valley	5	September 1968
Orbost	ABLV4 Latrobe Valley	2	April 1969
Eildon	ABGV3 Goulburn Valley	1	August 1969
Nhill	ABRV3 Ballarat	9	October 1970
Myrtleford	ABGV3 Goulburn Valley	2	December 1970

Commercial television

The commercial television stations are operated by companies under licences granted by the Postmaster-General. They rely for their income on

the televising of advertisements. The fee for a licence for a commercial television station is \$200 plus an amount based on the gross earnings from advertising receipts during the preceding financial year, assessed on a sliding scale varying from 1 per cent for amounts up to \$1m to 4 per cent on amounts over \$4m. In 1970-71 Australian licensees paid \$1,712,383 in licence fees, the fees for Victoria being \$618,568.

At 30 June 1971 the average weekly hours operated by commercial stations in Victoria were Melbourne, 122 and country, 60.

The following table shows the composition of television programmes on commercial stations in Victoria :

VICTORIA—COMPOSITION OF COMMERCIAL
TELEVISION PROGRAMMES, 1970-71
(Percentage of total transmission time devoted to each category)

Programme category	Melbourne commercial stations	Country commercial stations
Drama	52.2	53.6
Light entertainment	17.1	19.6
Sport	7.7	8.2
News	5.3	9.2
Family	8.4	3.7
Information	0.9	2.0
Current affairs	2.4	2.2
The arts	..	0.1
Education	6.0	1.4
Total	100.0	100.0

Details of commercial television stations in Victoria were as follows :

VICTORIA—COMMERCIAL TELEVISION STATIONS IN
OPERATION AT 30 JUNE 1971

Location	Call sign	Date of establishment
Melbourne	HSV7	November 1956
Melbourne	GTV9	January 1957
Melbourne	ATV0	August 1964
Bendigo	BCV8	December 1961
Latrobe Valley (Traralgon)	GLV10	December 1961
Goulburn Valley (Shepparton)	GMV6	December, 1961
Ballarat	BTV6	April 1962
Upper Murray (Albury)	AMV4	September 1964
Mildura	STV8	November 1965

National television

The A.B.C.'s television service in Victoria includes ABV Channel 2, Melbourne, and seven country stations. Programme material for the Victorian country national television stations is prepared at ABV Channel 2, Melbourne, and transmitted to the country centres by a series of broadband radio-telephone relay systems.

Details of national television stations in Victoria are as follows :

VICTORIA—NATIONAL TELEVISION STATIONS

Location	Call sign	Date of establishment
Melbourne	ABV2	November 1956
Bendigo	ABEV1	April 1963
Ballarat	ABRV3	May 1963
Traralgon (Latrobe Valley)	ABLV4	September 1963
Shepparton (Goulburn Valley)	ABGV3	November 1963
Albury (Upper Murray)	ABAV1	December 1964
Swan Hill (Murray Valley)	ABSV2	July 1965
Mildura	ABMV4	November 1965

All national television transmitter and relay facilities are provided and maintained by the Postmaster-General's Department.

The following table, an analysis of the programmes of Sydney station ABN, exemplifies programme allocation on the Commission's television stations in Australia :

COMPOSITION OF NATIONAL TELEVISION PROGRAMMES, 1970-71

Programme category	Number of hours	Percentage of total transmission hours	Australian origin percentage in each category	Programme category	Number of hours	Percentage of total transmission hours	Australian origin percentage in each category
Drama	1,298	28.50	9.57	Musical performances	34	0.75	75.66
Variety and acts	309	6.79	51.29	Religious	51	1.11	100.00
Sport	472	10.35	81.20	Rural	35	0.76	100.00
News	292	6.41	100.00	Arts and aesthetics	182	4.00	15.46
Public interest	579	12.71	66.34	Miscellaneous	270	5.92	99.53
Education	1,034	22.70	52.94				
				Total	4,556	100.00	50.42

A.B.C. television drama in Victoria

The first television drama produced by the Australian Broadcasting Commission in Victoria—entitled *Roundabout*, a half hour play by F. W. Beasley—was telecast on 4 January 1957, two months after the national television service began. With the opening of the Commission's studios at Ripponlea, Melbourne, on 21 May 1958, full scale productions could be arranged, and the first of these, *Captain Carvallo*, a drama by Denis Cannan, was transmitted "live" on opening night.

Since then between nine and twelve major dramas have been produced annually at Ripponlea and by 1970 some 150 individual plays and 600 episodes had been produced in this centre ranging from classic to contemporary drama. The A.B.C. has commissioned much of the output from Australian authors. Some 60 per cent of productions have been based on scripts by Australians and have included Tony Morphet's *Dynasty*, (later adapted as a television series); the drama *Torrents* by Oriel Gray, about a country town during the gold rush; and *The Cheerful Cuckold* by Alan Hopgood, which won the Awgie award presented by the Australian Writers' Guild, as the best television drama of 1968. Other notable Australian plays have included *The Tower* by Hal Porter, *The Shifting Heart* by Richard Beynon, *The Third Witness* by R. N. Callander, *A Ride on the Big*

Dipper by Ron Harrison, *Wind From an Icy Country* by Robert Amos, *A Time to Speak* by Noel Robinson, and *The House of Mancelllo* by Chris Gardner. Two others, *Outpost* by John Cameron and *The Astronauts* by Don Houghton, were purchased by the Columbia Broadcasting System.

Other important major productions have included four Shakespeare plays, *Romeo and Juliet*, *Antony and Cleopatra*, *Macbeth*, and *Othello*; three Russian plays, Chekhov's *The Bear* and *The Proposal* and Turgenev's *A Provincial Lady*; Sheridan's *The Rivals*, Shaw's *The Man of Destiny*, Oscar Wilde's *Salome*, Sophocles' *Antigone*, and the morality play *Everyman*. Among twentieth century dramas have been productions of Christopher Fry's *A Phoenix Too Frequent*, J. B. Priestley's *Dangerous Corner*, Robert Bolt's *A Man For All Seasons*, Friedrich Durrenmatt's *The Physicists*, T. S. Eliot's *Murder in the Cathedral*, Jean Cocteau's *The Two-Headed Eagle*, John Osborne's *Luther*, and Noel Coward's *Waiting in the Wings*.

In 1967 a new project, the Australian serial *Bellbird*, began to be produced at Ripponlea. This continuing story of life in a small country town is telecast Mondays to Thursdays each week. It was a new concept for Australian television and has since proved to be one of the Commission's most consistently popular programmes. *Bellbird* draws a regular daily audience of one and a quarter million viewers throughout Australia and surveys indicate that while it has a substantial following among city audiences, it enjoys even greater popularity in the country. *Bellbird* constitutes a major production exercise. During the programme's first three years the script required the services of 142 actors and actresses to play 57 leading roles and 85 minor roles. In addition, 250 players between them took 1,000 roles as *Bellbird* extras. Eighteen writers were employed on the scripts and the serial is often a training ground for new writers. To produce sufficient episodes for one week's television normally requires two days of filming, two days of rehearsal, and two days in the studio.

The opportunity to submit scripts for A.B.C. television drama productions is open to writers throughout Australia. Although the majority of unsolicited scripts show less than the required expertise, the greatest encouragement is given to any which show promise. For *Bellbird*, for instance, a comprehensive writers' guide is available setting out requirements, listing characters, actors and their various characteristics, and other background information. In addition to encouraging writers, many of the Commission's officers devote a good deal of time participating in various seminars held by such bodies as the Australian Writers' Guild, the Australian Society of Authors, the Society of Women Writers, the Producers and Writers' Guild, and the universities.

Drama students are given the opportunity of working in television through an annual production exercise conducted at the Commission's training school. The television drama department keeps in touch with drama societies, theatre companies, and professional live theatres in Melbourne and other Australian cities.

To enable local actors to observe the work of international artists at first hand the Commission has often cast overseas visiting artists in local productions. Some of the more memorable performances have been given by Anthony Quayle, Micheal Macliammoir, Judith Anderson, Margaret

Rawlings, Sir Robert Helpmann, Barbara Jefford, Leo McKern, Keith Michell, and Robert Speaight.

Broadcasting and television programme standards, 1965 ; Television programme research, 1966 ; Television technical planning, 1967 ; Television programmes, 1970 ; Music in radio and television, 1971

National parks

Victoria's national parks have mostly been established through a number of land "reservations" declared at irregular intervals since 1882. In broad terms the objects of the National Parks Act are to provide for the establishment and control of national parks, and to protect and preserve in their original form interesting aspects of the natural environment ranging from the botanical and zoological to the historical, geological, and scenic, and to provide for the enjoyment and edification of present and future generations as well as for scientific examination.

The original *National Parks Act* 1956, in setting up the National Parks Authority, provided for a chairman, a full-time director, and nine other members. There are five *ex officio* members, namely, the Secretary for Lands, the Chairman of the Forests Commission, the Secretary for Public Works, the Chairman of the Soil Conservation Authority, and the Director of Fisheries and Wildlife. Of the remaining four members, two represent groups or organisations interested in national parks, the other two being nominees of the Victorian Ski Association and the Victorian Government Tourist Bureau.

Section 8 of the *National Parks Act* 1958 provides that unless inconsistent with any special purpose for which a particular national park has been proclaimed, the Authority is to maintain every national park in its natural condition, conserving in it ecological associations and species of native plants and animals while protecting special features, at the same time endeavouring to exterminate exotic plants and animals. The Authority is also required "to encourage and regulate the use of national parks by the public" and to provide for its enjoyment of the parks ensuring, nevertheless, that they will be left unimpaired for the benefit of posterity. This includes the duty of fire protection. The Authority has experts to help with the various problems of national parks control. Several sub-committees deal with such basic matters as fire protection, works programmes policy, and fauna protection. The staff of the Authority grew from fifteen in 1958-59 to seventy-four by June 1971. Financial grants for expenditure in the Parks grew from \$44,999 in 1958-59 to \$444,092 in 1969-70 while, in the same period, revenue from all parks increased from \$32,255 to \$160,992.

At 30 November 1970 there were twenty-three national parks in Victoria covering an area of 506,531 acres, 0.9 per cent of the total land area of the State.

The last two parks to be dedicated were added to the national parks system in December 1969. They are the Lower Glenelg and the Captain James Cook National Parks. The former, with an area of 22,400 acres, is located off the Portland-Nelson Road along the Glenelg River. It is noted for its scenic river features, limestone gorge, and wide variety of native flora and fauna. The latter park of 6,700 acres is located on the east Gippsland coast between Marlo and Wingan Inlet. Its main attractions are immense dunes, virgin forest, and unspoiled beaches. Considered to

have been the first segment of the Australian shoreline which Captain James Cook observed in his voyage of 1770 along the east coast of this continent, it is also of historical interest.

Wyperfeld National Park

Located in the central Mallee region of the north-western part of the State and extending over 139,700 acres, Wyperfeld is Victoria's largest national park. Bordering the northern edge of the Wimmera River system the park is part of the north-western basin submerged by the Miocene sea which was later transformed into desert and finally fixed by vegetation in relatively recent times.

The low average annual rainfall of 12 inches has contributed to the establishment of three broad ecological units within the park. To the west, large sand dunes, sometimes 150 ft high, are covered with a heath-type vegetation characterised by banksia, casuarina, and tea-tree. By contrast the central area, bordering Outlet Creek, consists of dried-out flood plains supporting black box and red gum forests. These plains were last inundated in 1918 when the Wimmera River in turn filled Lake Hindmarsh, then—along Outlet Creek—Lake Albacutya, the dry lacustrine park network, and finally submerged Werringren Plain. Smaller sand dunes found in the eastern region are covered with mallee eucalypts, while stands of native pine (*Callitris*) are scattered throughout the park along the sand ridges.

Beginning in 1909 through the temporary reservation of 9,600 acres under the Land Act primarily to protect the Lowan (Mallee Fowl), the park had grown to its present size by 1948 due to successive permanent reservations. Initially, it had mostly belonged to the Wonga Lake Pastoral Run which, until 1855, had been part of the Pine Plains Pastoral Run originally stocked in 1847 by Mr J. M. Clow, the first white settler in the area.

Taken from the parish title whose name (as with another north-western parish—Wilhelmina) reflected the influence of local German settlers, Wyperfeld may be a graphical corruption of Wipperfeld, the name of a small Ruhr town meaning "edge of the plain". The park forms the eastern segment of the Big Desert region and is on the northern edge of the plain-like country of the Mallee-Wimmera wheatlands.

When the inaugural *National Parks Act* 1956 transferred the care, control, and management of the park to the newly formed National Parks Authority, the name of Wyperfeld was retained. Among Wyperfeld's 540 species of native plants are the rare bell fruit (native poplar) and blue boronia, the guinea flower and golden pennants, as well as fifteen species of wattle.

The above-average rainfall of 14.46 inches for the year ended 30 June 1970 promoted abundant growth of vegetation which has provided food for large numbers of black-faced kangaroos, emus, and multi-coloured parrots, including the Regent (Smoker) and Ringneck Parrots. Perhaps the most interesting bird is the Lowan whose control of the incubating temperature of its huge mounded nest remains a scientific enigma.

There are amenities within the Wonga Hut Tourist Area which cater for 10,000 visitors annually. The area includes a re-built whim (an early method of drawing water), a dog-leg fence (a pioneer method of enclosure), the five mile car trial, and the one mile long nature walk.

Expenditure

Since the formation of the National Parks Authority in 1957, amounts totalling \$3,346,288 have been expended on Victoria's national parks, including government allocations and revenue from services provided for park visitors. Details of the expenditure from 1965-66 to 1969-70 are as follows :

VICTORIA—NATIONAL PARKS EXPENDITURE
(\$)

National Park	1965-66	1966-67	1967-68	1968-69	1969-70
Wyperfeld	15,453	4,731	7,947	6,568	7,459
Kinglake	12,469	9,469	17,610	31,102	22,442
Ferntree Gully	12,784	25,271	34,997	24,113	190,255
Wilsons Promontory	84,214	105,291	212,580	237,842	169,100
Mount Buffalo	46,482	37,987	29,445	93,221	41,277
Churchill	12,271	4,856	5,860	13,071	13,083
Fraser	38,628	19,749	23,326	33,248	25,527
Tarra Valley and Bulga	8,015	4,408	4,642	4,936	5,031
Hattah Lakes	6,619	11,256	19,902	9,302	8,773
Mount Eccles	1,351	1,689	1,817	4,123	3,053
Mount Richmond	18	626	1,067	5,964	2,577
The Lakes	4,106	2,864	4,040	3,429	9,807
Glenaladale	1,289	1,444	1,658	1,442	2,156
Port Campbell	14,451	29,752	16,681	10,924	10,886
Little Desert	..	..	3,658	3,983	5,463
East Gippsland (Alfred, Lind, Mallacoota Inlet, Wingan Inlet)	10,263	8,804	6,983	19,226	30,539
General	5,318	6,298	10,266	9,312	13,789
Total	273,731	274,495	402,479	511,806	561,217

Special government grants have been made to the Country Roads Board for roads in or near national parks, \$73,999 being expended in 1965-66, \$91,636 in 1966-67, \$190,202 in 1967-68, \$107,430 in 1968-69, and \$69,094 in 1969-70.

Further references, 1961-71 ; Tourist Development Authority, 1962 ; Boy Scout Movement, 1964 ; Sport, 1964 ; Sir Colin MacKenzie Sanctuary, Healesville, 1965 ; Tourist attractions in Victoria, 1966 ; Victorian provincial gardens, 1967 ; Classification of national parks, 1968 ; Royal Botanic Gardens of Melbourne, 1969 ; Morwell National Park, 1969 ; Mt Buffalo National Park, 1970 ; Melbourne Zoological Gardens, 1971 ; Wilsons Promontory and Little Desert National Parks, 1971

EDUCATION

Education system

The *Education Act* 1872 marked the beginning of a new era in the history of education in Victoria. Henceforth, every child of school age in the Colony became entitled to a secular, compulsory, and free education. For administrative purposes, the Act was little more than an outline, power being granted to make regulations that would serve to provide the machinery for giving practical effect to its objects, but the principles laid down were most significant and far-reaching in their results.

Within Victoria, primary, secondary, and tertiary education are provided by a series of government and non-government schools and institutions. Fifteen years is the legal school leaving age. Control of government education is vested in the Minister of Education, assisted since 1964 by the Assistant Minister of Education.

Registration and supervision of non-government primary and secondary schools and the teachers in these schools are provided through the Council of Public Education presided over by the Director-General of Education. These are described in more detail on pages 446-52.

Higher education is available through the universities, institutes of advanced education, technical and agricultural colleges, and the Council of Adult Education. The Education Department is represented on the controlling council of each of these institutions whose activities are described in greater detail elsewhere in this book.

Although there are many and varied types of schools, they are all directed by the overriding principle that within the resources of schools and teachers available there should be an opportunity for every child to receive to the age of fifteen years at least an education suitable for his age, ability, and aptitudes, and that no child should be debarred by mental or physical handicap, or distance from school, from receiving an appropriate education. To make this possible, particularly in remote areas, and to facilitate consolidation, it has been necessary to develop a comprehensive set of bus services throughout the State, and in some cases, to pay conveyance allowances.

The link between the administration and the teacher in the field is the inspector. All schools are visited regularly by inspectors who report to the administration on the schools visited. During these visits, the inspectors also assess the work of the teachers whose promotion partly depends on the assessment given, and advise teachers on their work and problems.

Types of schools

Primary

The normal primary school provides seven years of education from Grades 1-6 (most pupils spend two years in Grade 1) and admits children from the age of 4½ years and upwards, many of whom would have previously attended kindergarten classes. These schools range in size from small one teacher schools to very large schools with as many as 1,000 and more pupils in attendance.

Primary school courses include work in written and spoken English, arithmetic, social studies, elementary science, music, physical education, health, art, and craft.

In certain country districts, consolidated schools have replaced the small scattered schools and they provide the normal Grades I-VI with special four year post-primary courses added in rural areas.

Secondary

These schools aim, by providing a sound general education, to develop in pupils right social attitudes, and to develop their intellectual powers so that they may cope successfully with the adult world. The general education is also a preparation for any form of tertiary education, professional or technical (including apprenticeship), or for direct entry into clerical positions, or positions in the business world. The most numerous of the post-primary schools are the high schools which are well distributed throughout the State and which offer six years of secondary education.

The emergence of the principle of secondary education for all has led to modifications of the normal professional course to provide for pupils whose

interests and abilities are beginning to develop along other lines. These modifications, usually beginning after the completion of the second year, include commercial, domestic, and practical subjects. Further subject specialisation according to the future career of the pupil occurs in the fifth and sixth years.

In smaller country towns, higher elementary schools provide four or more years of post-primary education, while central schools in the metropolitan area and central classes in rural areas offer two years of post-primary education.

Technical

The aim of technical schools is to continue a general education for at least five years beyond primary school, to assist pupils through experience in the subjects of the course of study to choose the types of professional, technical, industrial, or commercial work for which they are best suited, and to prepare them for higher study in a technical college.

The junior technical schools for both boys and girls provide a study of English, social studies, music, mathematics, science, art, practical subjects, and physical education. Provision is made for specialisation in the third, fourth, and fifth years before pupils move on to a technical college to study for a diploma or certificate course. Certain of the technical colleges have now been raised to degree course status.

A technical school education leads to wide employment opportunities in the technical and related professions, and in commerce, industry, and skilled trades, while the successful completion of the third year of the course is the minimum entry standard for most apprenticeships.

Special services and schools

Specialised schools and services to meet the demands of modern education are maintained and extended through officers and staffs in such fields as library services, visual aids, music and speech, physical education, arts and crafts, forestry, publications, survey and statistics, curriculum and research, teachers' welfare and accommodation, psychology and guidance, speech therapy, domestic arts (primary), and Australian Broadcasting Commission liaison. The State Schools' Nursery provides valuable instruction in horticulture for teachers and pupils, and supplies plants to schools. The School Medical Service and the School Dental Service, both controlled by the Department of Health, provide inspection and guidance to pupils throughout the State, while special schools and classes are provided for handicapped children, children in institutions, and children requiring remedial work in certain subjects.

The Correspondence School provides correspondence tuition to certain adults and all children who for geographical or medical reasons are unable to attend normal centres of instruction, or who attend a school whose facilities do not provide the subjects desired. Tuition is available in almost every subject of the primary school course, in a very wide range of subjects at all levels in secondary schools, and in the First or Second Class standard of the Infant Teacher's Certificate, but there is no provision for tuition in technical subjects many of which, however, are available through the Department of External Studies of the Royal Melbourne Institute of

Technology. In addition to regular school broadcasts to its pupils over the national radio stations, the Correspondence School conducts its own short-wave broadcasting programme for primary and secondary pupils.

Examinations

Although in certain countries there are not the formal examinations such as are accepted in Victoria, it is generally agreed that there must be some form of assessment, subjective or objective, as a measure of the pupil's progress and the efficiency of the school, and also as visible evidence to the outside world of a standard of attainment.

In the primary schools and in the early years of secondary and technical schools, examinations are conducted internally. An increasing number of secondary schools is being approved to hold internal examinations for the Leaving examinations now controlled by the Victorian Universities and Schools Examinations Board. In addition, the Education Department provides its own Leaving examination for technical and girls' secondary schools. The Higher School Certificate examination (known as the Matriculation examination prior to 1970), controlled by the Victorian Universities and Schools Examinations Board, is an external examination.

The curricula for primary, secondary, and technical schools are being carefully and systematically reviewed in the light of the needs of the pupils and the nature of the world in which they are going to live as adults. This review, which is part of a world-wide trend, has led to a number of most interesting experiments involving not only the content of the curriculum but also teaching methods, school organisation, and school design.

The abolition of the Intermediate examination, formerly controlled by the Victorian Universities and Schools Examinations Board, has left secondary schools free to experiment with methods of testing and assessing, as well as methods of reporting on students during the first four years of their secondary education. At the same time definite steps have been taken to review the curriculum not only for these years but for the fifth and sixth years as well, and for primary and technical schools in addition to secondary schools. Curriculum committees in which the Curriculum and Research Branch has played a prominent part have discussed curricula in detail. In addition, an exercise involving all secondary teachers in school, area, and regional meetings culminating in a residential seminar has produced a significant statement of general principles which are now being considered by each individual school as it prepares its own educational specifications and curriculum. This experiment in curriculum planning is creating great interest among teachers. The Curriculum Review Committee established by the Victorian Universities and Schools Examinations Board to consider the fifth and sixth years of secondary education has also attempted to involve schools and teachers in its work. Similar committees are at work in the primary and technical divisions.

Teaching service

Officers of the Recruitment Branch visit most schools annually to interview prospective applicants for teaching bursaries and to give information concerning the profession. Age and prerequisites for entry to training vary considerably according to the type and purpose of the course.

The majority of successful applicants are admitted to training direct from school where they attained their prerequisite academic qualifications. They are paid an allowance during training and, in return, enter into an agreement with the Department to teach for a period of three years after completing their course of training, except in the case of women when the period is reduced to one year in the event of marriage after training. An expanding scheme of in-service training makes it possible for teachers to gain further qualifications and to keep abreast of modern thought and development. The establishment of an experimental course in educational administration in 1966 marked a further significant development in this field. In the secondary and technical divisions where the shortage of staff is most severe, part-time courses of training for teachers have been provided for those who have the necessary academic background but lack the teacher training required for permanency. These courses have been expanded to meet the increasing numbers of applicants.

Staffing requirements at any particular school are determined by enrolment, with necessary adjustment for specialist and senior work. Upon these annually reviewed bases, the Committee of Classifiers in each of the Divisions (Primary, Secondary, and Technical), the Teachers' Tribunal, and the administration are responsible for the staffing of schools, and teachers may secure a permanent or temporary position in a school. Promotion within the service depends on qualifications, efficiency, and years of service, and is gained by applying for advertised and consequential vacancies. When teachers retire at 60 or 65 years of age, they receive fortnightly payments from a superannuation fund to which they and the Government have contributed.

The Education Department conducts a set of examinations through in-service training courses for practising teachers to qualify them for further promotion.

A summary table showing schools, teachers, and pupils in Victoria follows:

VICTORIA—GOVERNMENT AND REGISTERED SCHOOLS: NUMBER OF SCHOOLS, TEACHERS, AND PUPILS

Particulars	At school census date—				
	1966	1967	1968	1969	1970
All schools—					
Schools	2,821	2,819	2,826	2,807	2,796
Teachers	30,154	31,811	34,000	35,964	37,636
Pupils	706,641	725,803	744,411	761,577	776,468

Further reference, 1971; Victorian Education Department, 1961; State secondary education, 1962; State primary education, 1963; Educational administration, 1964; Audio-visual education, 1964; Technical education, 1965; Teacher training, 1967; Development of curricula, 1969; Recent developments, 1970

Pre-school education

Pre-school education is well established in Victoria, which has the highest enrolment in pre-school centres in Australia. In February 1971

there were 701 subsidised kindergartens catering for 35,324 children between the ages of 3 to 5 years. Of these kindergartens 298 are in country areas and 403 in inner and outer suburbs.

The pattern of pre-school education in Victoria is complicated ; the original voluntary organisations which established kindergartens in the early 1900s still play a leading part, but work with the Pre-School Division of the Maternal and Child Welfare Branch of the Department of Health.

However, except in a few municipal and inner suburban church kindergartens, teachers are employed by the voluntary committee responsible for the management of the kindergarten, and the Pre-School Division of the Department of Health through its qualified supervisors acts as an advisor to teachers and committees. This Department is also responsible for administering capital grants on a two-to-one basis up to a maximum of \$6,000. These grants are available to committees setting up kindergartens, and once established and approved, a subsidy is paid for the teacher's salary, either directly to the committee (in the case of independent kindergartens) or to a voluntary organisation for distribution to its affiliated kindergartens.

Some of the voluntary organisations employ their own supervisors and though their work is recognised by the Department, no subsidy to cover their salaries is available. Voluntary kindergarten committees as well as voluntary organisations must, therefore, raise considerable sums of money, the former for building, maintenance, equipment, and the salary of the untrained helper or aide, and the latter for supervisory salaries and general administration of the services of the kindergarten.

The initiative for setting up a kindergarten comes from the community or from a voluntary organisation, as the Department of Health has no policy for actually establishing kindergartens. Approval to build a kindergarten must, however, be given by this Department, whose officers need to be satisfied that there are sufficient pre-school children in the area to be served to warrant the establishment of the centre.

The programme in a subsidised kindergarten is introduced by the trained teacher through play and other activities. The teacher knows that basic concepts are being formed at this stage of the child's development which have a bearing on a child's language development and his understanding of science, mathematics, social studies, health and safety, music, and art. The programme is also planned in awareness of the fact that confident and secure relationships with adults and peers make an important contribution to learning, and to the child's whole attitude about self, others, and life in general.

Fully qualified kindergarten teachers have completed a three year course of teacher education at a college which specialises in or has a department specialising in, early childhood education. In Victoria the only training for kindergarten teachers is the Melbourne Kindergarten Teachers' College. (See pages 474-6.)

The Kindergarten Teachers' Association of Victoria is the professional organisation to which pre-school teachers belong. This association works for the maintenance of good standards in pre-school teaching, and in 1958 established a salary scale for kindergarten teachers.

All the voluntary organisations administering pre-school kindergartens and some other bodies concerned with pre-school education, including the Lady Gowrie Child Centre (a child study and research centre established by the Australian Pre-School Association and maintained first by the Common-

wealth Department of Health but now by the Department of Education and Science), are members of the Australian Pre-School Association (Victorian Branch), which has its national headquarters in Canberra. The A.P.A. has a co-ordinating function, but no administrative responsibilities within Australian pre-school education. However, its professional officers are responsible for the oversight of the educational programme at each of the six Lady Gowrie Child Centres.

Information about pre-school play centres, day nurseries, and crèches is to be found on pages 482-4.

At 31 December 1970 the chief statistics about kindergartens were as follows: independent kindergartens, 486; Free Kindergarten Union of Victoria and its affiliated kindergartens, 84; the Church of England Kindergarten Council, 47; the Presbyterian Kindergarten Council, 45; the Baptist Association of Pre-School Centres, 11; the Catholic Education Office, 14; the Melbourne City Council, 7; the Kew City Council, 6; and finally the Lady Gowrie Child Centre—a total of 701.

Government primary and secondary schools

Particulars of government schools, teachers, and pupils for the years 1966 to 1970 are shown in the following tables. In the tables, which include particulars of the Correspondence School and special schools, "primary" pupils have been considered as those up to and including the sixth grade, and "secondary" pupils as those above the sixth grade. Numbers of pupils refer to the school census date (1 August or the Monday nearest each year) and ages of pupils refer to age last birthday at census date.

VICTORIA—GOVERNMENT PRIMARY AND SECONDARY SCHOOLS:
NUMBER OF SCHOOLS, TEACHERS, AND PUPILS

Particulars	1966	1967	1968	1969	1970
Primary schools—					
Schools	1,855	1,849	1,847	1,813	1,787
Teachers	10,984	11,414	11,971	12,725	13,353
Pupils	320,009	331,299	338,722	346,160	353,080
Primary-secondary schools—					
Schools	46	41	38	53	52
Teachers	858	773	787	829	808
Pupils—Primary grades	14,103	12,300	12,038	12,014	11,435
Secondary grades	4,359	3,987	3,604	3,595	3,450
Secondary schools—					
Schools	311	320	330	334	340
Teachers	10,900	11,845	12,978	13,983	14,322
Pupils	183,067	190,335	199,062	207,648	214,707
Special schools—					
Schools	30	31	32	35	36
Teachers	321	341	367	420	437
Pupils	2,248	2,360	2,412	2,708	2,768
All schools—					
Schools	2,242	2,241	2,247	2,235	2,215
Teachers	23,063	24,373	26,103	27,957	28,920
Pupils	523,786	540,281	555,838	572,125	585,440

NOTE. In this table a primary school is considered to be one which has primary pupils only, a secondary school one which has secondary pupils only, and those which have both primary and secondary pupils are classified as primary-secondary schools.

**VICTORIA—GOVERNMENT PRIMARY AND SECONDARY SCHOOLS:
AGES OF PUPILS**

Age last birthday (years)	At census date—				
	1966	1967	1968	1969	1970
Under 6	47,605	48,693	48,992	48,691	48,120
6	48,699	51,022	51,777	51,959	52,243
7	48,305	48,714	51,196	52,158	52,586
8	46,849	48,844	48,817	51,677	52,567
9	46,049	47,186	49,075	49,529	51,966
10	45,519	46,620	47,576	49,471	50,256
11	44,653	46,024	46,916	48,155	50,209
12	42,671	44,516	45,853	46,467	47,998
13	44,744	44,432	45,737	47,587	48,646
14	42,749	44,181	44,403	46,339	47,691
15	33,614	34,799	36,932	37,445	39,150
16	20,647	22,179	23,809	25,973	26,461
17	8,781	10,119	11,218	12,491	13,268
18	2,324	2,456	2,979	3,485	3,514
19 and over	577	496	558	698	765
Total	523,786	540,281	555,838	572,125	585,440

The following table shows the census enrolment of pupils attending each class of government primary and secondary schools in Victoria in 1970 :

**VICTORIA—GOVERNMENT PRIMARY AND SECONDARY SCHOOLS:
CLASS OF SCHOOL : SEX OF PUPILS, 1970**

Class of school	Number of schools	Number of pupils		
		Boys	Girls	Total
Primary schools	1,782	179,584	166,513	346,097
Central schools, classes, and post-primary	17	4,770	4,104	8,874
Consolidated and group	31	5,415	4,980	10,395
Higher elementary	8	883	861	1,744
Girls secondary	1	..	224	224
Junior technical	94	48,177	9,619	57,796
High schools	245	67,287	89,400	156,687
Correspondence	1	380	475	855
Special schools	36	1,703	1,065	2,768
Total	2,215	308,199	277,241	585,440

NOTE. The classification of the schools is in accordance with that used by the Education Department and differs from that used in the first table in this section.

The following tables show the age and grade of all pupils at the primary and secondary levels of education in government primary and secondary schools for the year 1970:

**VICTORIA—GOVERNMENT PRIMARY EDUCATION: AGE AND
GRADE OF PUPILS, 1970**

Age	Grade						Un- graded pupils	Total
	1	2	3	4	5	6		
Under 6	47,978	4	..	..	..	..	138	48,120
6	51,112	1,021	2	..	..	..	108	52,243
7	7,228	43,850	1,355	..	..	..	153	52,586
8	251	8,057	42,456	1,602	3	..	198	52,567
9	12	293	8,599	41,083	1,769	4	206	51,966
10	2	15	422	8,944	38,451	2,179	233	50,246
11	..	2	25	495	8,957	37,611	334	47,424
12	..	1	7	20	660	9,114	315	10,117
13 and over	6	13	17	4	50	841	1,083	2,014
Total	106,589	53,256	52,883	52,148	49,890	49,749	2,768	367,283

**VICTORIA—GOVERNMENT SECONDARY EDUCATION: AGE AND
GRADE OF PUPILS, 1970**

Age	Form						Total
	I (or Grade 7)	II (or Grade 8)	III	IV	V	VI	
Under 12	2,784	11	..	..	..	..	2,795
12	34,969	2,900	12	..	..	..	37,881
13	10,790	33,725	2,951	12	..	..	47,478
14	1,353	10,948	31,951	2,968	16	..	47,236
15	91	1,119	9,548	25,800	2,327	2	38,887
16	2	70	1,081	7,370	16,532	1,325	26,380
17	1	2	63	755	5,610	6,823	13,254
18	..	..	5	46	750	2,706	3,507
19 and over	..	..	..	4	86	649	739
Total	49,990	48,775	45,611	36,955	25,321	11,505	218,157

Commonwealth aid to education in Victoria

Although education is primarily a State responsibility, the Commonwealth has instituted a number of measures of direct assistance to educational institutions and to students.

When the Commonwealth Department of Education and Science was established in December 1966 its broad functions included general education policy; educational research; administration of various schemes of assistance for overseas students in Australia, particularly students under the Colombo Plan; Australian activities in relation to Unesco; administration of scholarships for Australian students; administrative assistance for the committee concerned with the development of the concept and scheme of advanced education in Australia; science facilities grants to secondary government and non-government schools; and the provision of a secretariat for the Australian Research Grants Committee. Since its establishment, the Department has undergone considerable development, both through the growth of existing areas of activity and the acquisition of new functions.

Details of Commonwealth programmes in education, with special reference to Victoria, follow.

Universities and colleges of advanced education

Commonwealth expenditure on universities and colleges of advanced education has aided the continued expansion of tertiary facilities. The following table shows the grants for capital and recurrent expenditure recommended by the Australian Universities Commission and approved by the Commonwealth Government for the triennia 1967-1969 and 1970-1972. The capital programme provides mainly for university buildings and capital equipment.

VICTORIA—UNIVERSITIES(a) AND COLLEGES OF ADVANCED EDUCATION
PROGRAMME, 1967-1969 AND 1970-1972 TRIENNA
(\$'000)

Parti- culars	Universities				Colleges of advanced education				Total			
	1967-1969 triennium		1970-1972 triennium		1967-1969 triennium		1970-1972 triennium		1967-1969 triennium		1970-1972 triennium	
	Cwth share	Total	Cwth share	Total	Cwth share	Total	Cwth share	Total	Cwth share	Total	Cwth share	Total
RECURRENT												
Victoria	34,170	98,650	45,280	126,910	9,490	27,060	18,240	52,000	43,660	125,710	63,520	178,910
Australia	179,880	413,370	239,390	541,360	21,130	58,040	48,660	128,590	201,010	471,410	288,050	669,950
CAPITAL												
Victoria	20,100	40,210	18,210	36,420	6,310	12,620	15,000	30,000	26,410	52,830	33,210	66,420
Australia	69,290	126,660	75,470	137,500	26,760	50,760	57,870	107,250	96,050	177,420	133,340	244,750
TOTAL												
Victoria	54,270	138,860	63,490	163,330	15,800	39,680	33,240	82,000	70,070	178,540	96,730	245,330
Australia	249,170	540,030	314,860	678,860	47,890	108,800	106,530	235,840	297,060	648,830	421,390	914,700

(a) Does not include provision for any supplementary grants for increased academic salaries or other purposes.

The provision of Commonwealth financial assistance for the development of colleges of advanced education throughout Australia was a major part of the Commonwealth Government's decisions in March 1965 on the recommendations of the Committee on the Future of Tertiary Education in Australia (the Martin Committee). The Commonwealth is assisting this new development by making both capital and recurrent grants to the new colleges on a triennial basis and under the formulae used for grants to universities. The Commonwealth Advisory Committee on Advanced Education was appointed in September 1965 to advise the Commonwealth on the development of colleges of advanced education.

A significant development for which funds will be provided in the current triennium is the provision of residential accommodation at colleges of advanced education in country areas. The Commonwealth will contribute \$187,500 for residential accommodation at both the Bendigo Institute of Technology and the Ballarat Institute of Advanced Education.

Teachers colleges

During the three year period from 1 July 1967 to 30 June 1970 the Commonwealth paid a total amount of \$24m in unmatched grants to State Governments for the construction of teachers colleges under the provisions of the *States Grants (Teachers Colleges) Act* 1967. The Commonwealth

has extended this programme of unmatched grants for a further three years with \$30m for the period 1 July 1970 to 30 June 1973. It is estimated that the \$54m will provide nearly 12,000 new and replacement places for full-time or equivalent part-time trainee teachers at teachers colleges. A condition of all these grants to the States is that 10 per cent of the places must be made available as a result of the programme to students not bonded to State Education Departments. Under this scheme, Victoria has been allocated the sum of \$14.9m for the six year period from 1 July 1967 to 30 June 1973. In Victoria, in addition to extending a number of existing colleges, the new La Trobe College will be commenced.

Science laboratories

Commencing on 1 July 1964 and for a period extending to 30 June 1968 the Commonwealth made available to the States an amount of \$42.3m in unmatched grants for science buildings and equipment in government and independent secondary schools throughout Australia. This amount has been distributed. A further amount of \$37.7m was available under current legislation over the three financial years 1 July 1968 to 30 June 1971. The amount for independent schools was, during the 1968-1971 triennium and in 1967-68, at double the rate of the earlier years of the scheme. The money was allocated in specific amounts to groups of schools. In the case of independent schools, distribution of funds was based on the recommendation of advisory committees in each State, one for Roman Catholic, one for other non-government schools. The additional funds for independent schools were decided upon on the basis of particular need.

The following table shows the distribution of grants in Victoria to government, Roman Catholic, and other independent schools for the triennium 1 July 1968 to 30 June 1971 together with the total amounts which were expended in all the States by the end of that triennium :

VICTORIA—SECONDARY SCHOOLS SCIENCE FACILITIES PROGRAMME
(\$'000)

Particulars	Government secondary schools	Non-government secondary schools			Total secondary schools
		Roman Catholic	Other	Total	
Triennium 1 July 1968 to 30 June 1971—					
Victoria	6,123	2,872	1,642	4,514	10,637
Australia	21,713	10,740	5,268	16,008	37,721
Total 1 July 1964 to 30 June 1971—					
Australia	50,665	19,433	9,915	29,348	80,013

The Commonwealth Government has extended the scheme beyond 30 June 1971 to 30 June 1975. Under the *States Grants (Science Laboratories) Act 1971* the Government has revised the basis of allocation of grants among States and among groups of government schools and independent schools so that the grants available are related to outstanding needs.

Secondary school libraries

In August 1968 the Commonwealth Government announced a new scheme of assistance for secondary school libraries similar to the science facilities programme. A total of \$27m was available over the three year period commencing 1 January 1969 to assist with the development of library facilities in government and independent secondary schools throughout Australia. Grants were available for the erection, alteration, or extension of library buildings on which construction commenced on or after 14 August 1968. In addition, assistance was given for the conversion of existing school buildings to libraries. Funds were also available for the provision of furniture, equipment, books, and instructional materials for a secondary school library. Schools were eligible in whole or part according to their individual circumstances. The following table shows the amounts which were available to government and independent secondary schools in Victoria in the three years of the programme :

VICTORIA—SECONDARY SCHOOLS LIBRARIES PROGRAMME,
1969 TO 1971
(\$'000)

State	Government secondary schools	Non-government secondary schools			Total secondary schools
		Roman Catholic	Other	Total	
Victoria	5,641	1,241	709	1,950	7,591
Australia	20,064	4,655	2,281	6,936	27,000

The Minister for Education and Science has appointed the Commonwealth Secondary Schools Libraries Committee to advise him on suitable standards to be adopted for the Commonwealth programme particularly in relation to independent schools. As with the Commonwealth Science Facilities Scheme, the Minister also has the advice of two advisory committees in each State, one representative of Roman Catholic secondary schools and one representative of other non-government secondary schools. The administration of the programme for government schools as in the science scheme, is the responsibility of the various State education departments. They determine priorities and the allocations of available funds among their schools within a general programme approved by the Commonwealth Minister.

As a contribution towards meeting the urgent need for more trained librarians to staff the new and existing libraries, \$50,000 was made available during 1968-69 for the in-service training of teacher librarians. These funds enabled the Commonwealth to sponsor several short specialist courses in school librarianship in conjunction with State education departments and other interested organisations. The courses were available to teachers from government and independent schools. Further short courses have been sponsored during 1969-70 and 1970-71, with additional funds made available during those years.

Commonwealth technical training grants

From 1 July 1964 to 30 June 1971 the Commonwealth made available to the States \$70m in unmatched capital grants for building and equipping

technical colleges to assist trade and technician training. Agricultural colleges have also been assisted. In the earlier years of the scheme some of the projects provided facilities for tertiary education. Since the introduction of the Advanced Education Programme funds now being made available are being devoted almost exclusively to apprentice and technician training. The amount available to Victoria during the seven year period of the scheme from 1 July 1964 to 30 June 1971 was \$19,765,600.

Pre-school teachers colleges

To assist Australian pre-school teachers colleges to expand their present capacity, unmatched capital grants totalling \$2m were made over the three years 1 July 1968 to 30 June 1971. The amount to be distributed to the Melbourne Kindergarten Teachers' College, as specified in the schedule to the *States Grants (Pre-school Teachers Colleges) Act* 1968 was \$210,000. Payments to the States in 1969-70 under the Act totalled \$371,857. It is estimated that by 30 June 1970, \$2.5m was paid.

Aid to independent schools for running costs

From the commencement of the 1970 school year, the Commonwealth has provided per capita grants to independent schools, including special schools for the handicapped and for Aboriginal children, at the rate of \$35 per primary pupil and \$50 per secondary pupil per annum. The grants are intended to help with the running costs of independent schools and a statement by a qualified accountant to the effect that the grant has been used in this way by the school in question is required. To be eligible to receive this assistance a school must provide full-time primary or secondary education, or both. It must not be conducted by a State Government and it must not be conducted for the profit, either directly or indirectly, of any individual or individuals.

A school's annual entitlement is based on the enrolment at the schools census date (at or about the beginning of August). Payments are made in two instalments—an advance payment at the beginning of the school year and the final payment after the school census date. The grants are paid to independent schools in each State by the Government of that State from moneys provided by the Commonwealth, with the administration of the scheme being undertaken by the Commonwealth Department of Education and Science. It is estimated that Victoria's share of the approximate total of \$24.3m for 1970-71 will be \$7.9m, of which \$4m will go to primary schools and \$3.9m to secondary schools.

Migrant education

To help migrants to be assimilated more quickly into the Australian community, a system of migrant education has been developed to teach them English and to give them some knowledge of the Australian way of life. The administration of courses, which are financed by the Department of Immigration as part of the integration programme, is undertaken by the State education departments on behalf of the Commonwealth Government. The Department of Education and Science provides advice on migrant education and prepares teaching materials.

Many migrants receive their first instruction in English from shipboard education officers. Then, in Australia, free continuation classes are organised

by the education departments wherever a group of migrants wishes to learn English. In addition to this, the Department of Education and Science, the State education departments, and the Australian Broadcasting Commission co-operate in providing a combined radio/correspondence course in English. In 1970 special intensive courses providing full-time instruction over a period of eight weeks were introduced to enable migrants with professional qualifications to learn English quickly.

Under the Child Migrant Education Programme which commenced in April 1970, the Commonwealth will finance over a five year period the following items in relation to government and independent schools: the salary costs of teachers employed to teach migrant children in special classes, and the necessary supervisory staff; special training courses for teachers in the methods of teaching English as a foreign language; the provision of approved capital equipment for special classes; and the provision of suitable learning and teaching material. The estimated cost of the programme for 1970-71 is \$1.64m. Amounts to be provided in the 1971-72 and subsequent years will be determined in the context of budgets at that time and are expected to be about \$1.5m per year.

Overall Commonwealth policy in relation to the child migrant education programme is the responsibility of the Minister for Immigration in consultation with the Minister for Education and Science, and the two departments co-operate in its administration. Detailed negotiations with State and independent school authorities are undertaken by the Department of Education and Science, which is also engaged in arranging special training for teachers and the production of suitable teaching and learning materials.

Commonwealth scholarships

The Commonwealth offers annually a number of awards under five main scholarship schemes. These are the Commonwealth Secondary Scholarship Scheme, the Commonwealth Technical Scholarship Scheme, the Commonwealth Advanced Education Scholarship Scheme, the Commonwealth University Scholarship Scheme, and the Commonwealth Postgraduate Award Scheme. Further information about these is contained on pages 441-2. The following table sets out the number of scholars in training under all five schemes between 1951 and 1970:

VICTORIA AND AUSTRALIA—COMMONWEALTH SCHOLARSHIP SCHEMES(a): SCHOLARS IN TRAINING, 1951 TO 1970

Scholarship Scheme	1951		1961		1966		1968		1970	
	Vic.	Aust.	Vic.	Aust.	Vic.	Aust.	Vic.	Aust.	Vic.	Aust.
Postgraduate	..	..	34	217	186	874	329	1,372	437	1,730
University	..	..	..	..	5,998	20,570	7,738	24,784	8,988	30,510
Advanced Education	2,153	6,444	3,707	12,688	765	1,526	964	2,307	1,699	4,656
Secondary	..	..	..	..	5,439	15,777	5,420	19,437	5,378	19,572
Technical	..	..	..	..	1,267	2,749	1,292	4,365	1,367	4,580
Total	2,153	6,444	3,741	12,905	13,655	41,496	15,743	52,265	17,869	61,048

(a) Includes new and continuing scholars for each period.

Benefits under the various schemes are summarised in the section which follows.

Scholarships and bursaries

Many scholarships are available to make it possible for pupils to remain at school, and particularly in the junior secondary and technical forms there is an increasing tendency to award scholarships without a specific examination. Most of these scholarships are financed from State Government funds which provide scholarships for one third of all pupils but in most schools there are also locally and privately endowed scholarships.

Victorian Government scholarships and bursaries

The Education Department makes available Junior Scholarships at Form II level. In 1971 their value was \$78, to be spread over four years, plus \$50 a year for fees at registered schools. There are also teaching bursaries of \$100 each to be taken at Leaving or Higher School Certificate (or the equivalent technical) standard.

Senior scholarships for university or senior technical education, varying in value from \$20 to \$80 per annum, and tenable for up to six years, and sixty university free places covering fees for lectures and examinations, together with a living allowance (subject to a means test) of up to \$520 per annum, are also available.

Commonwealth University Scholarship Scheme

The Commonwealth University Scholarship Scheme provides for the award of scholarships tenable at universities. There are 8,500 Open Entrance, 4,000 Later Year, and 250 Mature Age scholarships awarded each year. Open Entrance scholarships are awarded to students under 30 years of age on the results of examinations qualifying for university entrance. About 2,700 are for students in Victoria. Later Year scholarships are awarded to students under 30 years of age who have completed one or more years of an approved course and Mature Age scholarships are awarded to persons over 30 but under 40 years of age, on the basis of their entire academic record. Open Entrance, Later Year, and Mature Age scholarships may be used for approved full-time or part-time courses.

These scholarships cover all compulsory fees. A means test applies only in relation to the granting of living allowances, which in 1971 provided up to \$700 per annum for students living with parents, or up to \$1,100 for those living away from home. All aspects of the Commonwealth University Scholarship Scheme are reviewed regularly.

Commonwealth Advanced Education Scholarship Scheme

As from the beginning of 1966 the Commonwealth Advanced Education Scholarship Scheme provided for the award of scholarships tenable at approved non-university institutions.

In 1971, 2,500 awards were offered; about 830 of these were for Victoria. Open Entrance scholarships were awarded on performance in the Higher School Certificate examination or its equivalent, and in certain cases assessment on entrance tests, personal interviews, and other special criteria were also taken into account. Later Year scholarships were awarded on results obtained in approved courses. There is no separate provision for Mature Age applicants but those who exceeded the age limit were considered on their merit as special cases. Commonwealth Advanced Education Scholarships provide the same benefits as outlined above under Commonwealth University

Scholarships. All aspects of the Commonwealth Advanced Education Scholarship Scheme are regularly reviewed.

Commonwealth Secondary Scholarship Scheme

The Commonwealth Secondary Scholarship Scheme provides assistance to students during the final two years of secondary schooling. Approximately 2,800 awards are made in Victoria each year on the result of a competitive examination set by the Australian Council for Educational Research together with ratings given by the schools.

Benefits comprise a maintenance allowance of \$200, a textbook allowance of \$50, and a fees reimbursement of up to \$150 per year for compulsory school service fees.

Commonwealth Technical Scholarship Scheme

Commonwealth Technical Scholarships are awarded on performance in school examinations at the fourth form level or higher, in the final year of a trade course, or on results obtained in an approved course. Students proceeding to Forms 5 and 6 may qualify for a scholarship on their fourth form results only, and for these students Commonwealth Secondary and Commonwealth Technical Scholarships are interchangeable. Approximately 670 awards were made in Victoria in 1971.

Benefits for full-time students are the same as those for Commonwealth Secondary Scholarship holders. Part-time students taking approved Certificate Technician, Higher Technician, or special Diploma courses receive an annual allowance of \$100 and reimbursement of up to \$100 per year for fees.

The following table shows details of the Victorian Education Department and Commonwealth scholarship schemes :

VICTORIA—NUMBER OF GOVERNMENT SCHOLARSHIPS,
FREE PLACES, AND BURSARIES GRANTED (a)

Particulars	Year of commencement				
	1966	1967	1968	1969	1970
State Government scholarships—					
Secondary education—					
Junior scholarships	19,255	19,788	19,641	20,440	20,921
Senior technical scholarships	268	218	251	240	254
Teaching bursaries	2,009	2,113	2,128	2,123	2,122
University education—					
Senior scholarships	42	43	43	43	42
Free places	77	79	78	86	79
Commonwealth scholarships—					
Secondary education—					
Secondary scholarships	2,825	2,795	2,791	2,696	2,825
Technical education	703	710	696	691	681
Tertiary education—					
Open entry	1,541	2,032	1,921	2,343	2,747
Later years	438	965	730	775	1,333
Mature age (b)	29	124	31	58	52

(a) Figures are for students who accepted scholarships and bursaries and were in training.

(b) Higher figures in 1967 are due to change of policy.

Commonwealth scholarships, 1964

Technical education

The discovery of gold in the mid-nineteenth century led to the establishment in many areas of Australia of schools of mines and technical colleges for the purpose of providing training in the various skills needed

to service the gold mining industry. The first of these was the School of Mines and Industries, Ballarat, founded in October 1870, and by 1900 there were eighteen such schools. In the following decade it became clear that secondary level courses were required to bridge the gap between primary schooling and the specialised courses of the technical colleges.

In 1912 the first junior technical school was opened for boys in West Melbourne in association with the Working Men's College. A similar school for girls was established in 1916 at the Swinburne Technical College. In 1971, one hundred years after the formation of the School of Mines at Ballarat, there were 110 technical schools and institutes throughout Victoria offering courses of secondary, vocational, and tertiary education. The following table gives a summary of senior technical education in Victoria for the years 1964 to 1970. The 1969 and 1970 figures exclude tertiary students in colleges affiliated with the Victoria Institute of Colleges.

VICTORIA—TECHNICAL EDUCATION : NUMBER OF SENIOR TECHNICAL SCHOOLS AND STUDENTS

Particulars	1964	1965	1966	1967	1968	1969 (b)	1970 (b)
Number of schools	73	79	82	83	83	90	93
Number of students (a)							
Full-time	7,403	7,894	8,740	9,243	10,014	4,245	3,926
Part-time	58,027	58,549	58,026	59,654	60,188	47,028	45,905
Total	65,430	66,443	66,766	68,897	70,202	51,273	49,831

(a) Excludes students studying single subjects.

(b) Excludes tertiary students in colleges affiliated with the Victoria Institute of Colleges.

The following table gives details of students attending technical schools in 1970 showing the type of course taken and whether taken as a full-time or part-time student :

VICTORIA—TECHNICAL EDUCATION : COURSES AND STUDENTS, 1970

Courses	Number of enrolments		
	Full-time	Part-time	Total
Diploma (a)	2,833	1,913	4,746
Certificate	660	6,189	6,849
Technician	326	2,234	2,560
Trade	..	31,479	31,479
Other courses	107	4,090	4,197
Single subjects	..	19,969	19,969
Total	3,926	65,874	69,800

(a) Students enrolled in first year diploma studies (Form VI) or in colleges not affiliated with the Victoria Institute of Colleges.

Facilities

Technical education is available for secondary students commencing at Form I after primary school and leading to the Leaving Technical examination at Form V. From Forms I to III a balanced education is given with emphasis on the development of the ability to communicate, the understanding of the physical and social environment, and the aesthetic and physical development of the individual. These objectives are attained

by providing studies in both theoretical and practical subjects closely associated with the needs and abilities of students. After Form III more specialised studies are available which can lead to positions in industry, or to further vocational training in applied science, art, commerce, technician or craft apprenticeships, and home economics.

Successful completion of Form V is the current entrance requirement for most diploma courses in the colleges of advanced education. Altogether, fourteen colleges are offering full diploma courses and nineteen are teaching part diploma courses. Since the establishment of the Victoria Institute of Colleges (see pages 467-74), eleven of the older colleges have become affiliated with the Institute. These colleges are now controlled by their own independently constituted councils and are responsible to the Institute for the development and operation of tertiary courses and to the Education Department for the conduct of non-tertiary courses. Entry to apprenticeship is based on the minimum completion of Form 3 studies. However, standards are rising for most trades with increasing numbers of entrants completing Intermediate Technical and Leaving Technical studies. In 1971 the length of indentures was reduced to 4 years.

The courses of study provided for apprentices are conducted for three years in most trades on a compulsory day release basis. In some trades, however, block release training is now becoming important (see also pages 197-9). The more common trade courses are available in the building and metal trades in many technical schools in metropolitan and country areas. Specialised trade schools are available for courses in food trades, hairdressing, painting and decorating, printing and graphic arts, and textiles. In recent years the rising standard of diploma courses has indicated a need for the development of a wide range of courses to fill the gap between professional courses and craft training. Technician courses have now been instituted, after extensive consultation with industry, at the following levels:

1. More able tradesmen are given a sound training in mathematics, science, and communicating skills (Form 5 Technician level) and other manipulative skills are developed, or the original skills are developed to a higher degree. These Trade Technician Courses will be used to train the more highly skilled tradesmen, junior production planners, detail draughtsmen, marine engineers (Part B second class level), and diagnosticians who can operate in one or in some instances two major areas.
2. Courses at a higher level, with mathematics, physics, and communicating skills are taken to Form 6 Technician level. These Higher Technician Courses will train power station operators, design draftsmen, marine engineers (first class level), laboratory and field test officers, senior production planners and work study personnel, electrical testers, and diagnosticians for the more complex control systems who can operate in two or three major areas.

In this way, courses are now available in specialities associated with automotive, electrical, mechanical, production, and civil technologies, metal fabrication, aircraft mechanics, detail and design drafting, naval architecture, and building construction.

Further references, 1965, 1971; Swinburne Technical College, 1963; Science and Technology Careers Bureau, 1965

Education Department expenditure on education

During 1969-70, \$313,180,000 was spent by and on behalf of the Education Department of Victoria. This amount covered expenditure from

both revenue and loans, and included payments made by the Treasury to the universities, except for an amount paid for Bacteriological Laboratory Services. The expenditure shown in the following table differs from the figures on education expenditure shown on pages 622 and 641 of the *Year Book*, in that the amounts shown in the Finance Section exclude payments for superannuation and pensions and workers compensation.

The following tables show details of expenditure by and on behalf of the Education Department for 1968-69 and 1969-70. They have been revised to comply with a new format agreed upon at a conference of representatives of the various State education departments in February 1969 and are not comparable with tables prior to 1968-69 shown in this section of previous *Year Books*.

VICTORIA—EDUCATION DEPARTMENT:
EDUCATIONAL EXPENDITURE
(\$'000)

Expenditure on—	1968-69	1969-70
STATE SCHOOLS		
Primary—		
Recurring	84,124	94,412
Capital	9,671	10,998
Total	93,795	105,410
Secondary (a)—		
Recurring	88,735	101,457
Capital	13,678	15,209
Total	102,413	116,666
Technical (b)—		
Recurring	7,959	8,196
Capital	1,901	2,022
Total	9,860	10,218
Total State schools	206,068	232,294
TERTIARY EDUCATION		
University—		
Recurring	18,383	20,990
Capital	6,658	7,221
Total	25,041	28,211
Colleges of advanced education—		
Recurring	5,502	8,421
Capital	2,329	2,981
Total	7,831	11,402
Scholarships, fees, allowances for students at universities or colleges of advanced education	28	26
Total tertiary	32,900	39,639
TEACHER EDUCATION	22,176	26,293

VICTORIA—EDUCATION DEPARTMENT :
EDUCATIONAL EXPENDITURE—*continued*
(\$'000)

Expenditure on—	1968-69	1969-70
OTHER EXPENDITURE		
Pre-school education	2,918	3,156
Public library	2,064	2,283
Adult education	193	200
Non-government schools grants, subsidies, scholarships and bursaries, and pupil conveyance	5,580	7,032
Agricultural education (c)	1,583	2,270
Miscellaneous	22	11
Total other expenditure	12,360	14,952
Total expenditure on education	273,504	313,180

- (a) Includes secondary technical.
(b) Excludes colleges of advanced education.
(c) Excludes agricultural colleges of advanced education.

The preceding table excludes tuition fees, material fees, analysis fees, donations received, sales of class material and school notes, and other such receipts which were retained and expended by the various technical school councils.

VICTORIA—EXPENDITURE ON EDUCATION IN GOVERNMENT SCHOOLS
AND ON TEACHER EDUCATION, 1969-70
(\$'000)

Classification	Primary education	Secondary education (a)	Technical education (b)	Total expenditure in State schools	Teacher education
Cost of administration	3,618	2,893	313	6,824	340
Cost of instruction	71,469	80,605	5,475	157,549	23,145
Building operation and maintenance (c)	7,150	6,197	948	14,295	408
Fixed charges (d)	12,175	11,762	1,460	25,397	1,380
Capital expenditure	10,998	15,209	2,022	28,229	1,020
Total	105,410	116,666	10,218	232,294	26,293

- (a) Including secondary technical education.
(b) Excludes expenditure on colleges of advanced education.
(c) Includes wages of caretakers, cost of cleaning, fuel, water, repair of buildings, upkeep of grounds, repair and replacement of furniture, etc.
(d) Includes pensions and superannuation, rent of buildings, pay-roll tax, and interest on loans.

The above expenditure excludes expenditure for school medical and dental services which amounted to \$1,201,000 in 1969-70.

Council of Public Education

Constitution

The *Registration of Teachers and Schools Act* 1905 came into operation on 1 January 1906, and provided for the registration of schools other than State schools, and of those teaching in them. It continued until the *Education Act* 1910, which, *inter alia*, established the Council of Public Education to exercise these functions.

Registration of teachers

Non-government schools in Victoria are not permitted to employ teachers who are not registered with the Council of Public Education, and to secure registration a teacher must have some form of recognised teacher training. Each person applying for registration has to give sufficient information to permit the Registration Committee to determine at what level he should be registered, namely, whether he should be registered as a sub-primary, primary, junior secondary, or secondary teacher, or as a teacher of special subjects.

Teacher education

Although persons with appropriate qualifications may be recruited as teachers from other States or from overseas, or may previously have qualified in government teachers colleges, there are facilities in Victoria at six non-government institutes for the training of teachers for the non-government schools. Of these, five colleges form part of the Catholic system; the remaining college, Mercer House, Armadale, trains teachers for the other non-government schools.

Finance for these colleges comes from fees of the students, and from payments by sponsoring bodies or schools. Students in these colleges are eligible for Commonwealth Tertiary Scholarships.

Courses for primary teacher education are conducted at all of these institutes and about 400 students complete their courses each year. In addition, Mercer House conducts junior secondary, arts and crafts, and domestic science courses for full-time and part-time students, as well as in-service courses.

Registration of schools

All non-government schools must be approved, before registration, by the Council of Public Education as having adequate buildings and trained staff. They are also subject to inspection by inspectors of the Education Department. Each school is registered either as a sub-primary, primary, junior secondary, or secondary school, or as a school of any two or more such descriptions.

Provision is also made in the *Education Act* 1958 for the registration of technical schools and special schools. In addition, the Council can refuse to register any school if it considers that its premises or the instruction to be given in it will not be of a satisfactory standard.

Registered schools

Non-government schools derive their working income from fees charged, very few having any endowments. About 20 per cent of the schools have accommodation for boarders; the remainder function as day schools only. Scholarships are offered by many schools, a full scholarship generally giving a remission of all tuition fees. Many of the schools encourage students to return to school for a second year of Fifth or Sixth Form study, and by providing a wide choice of subjects and cultural pursuits lying outside a set examination syllabus aim to provide a suitable preparation for more advanced studies. Teaching methods within these schools are similar to those employed in government schools but, in the denominational schools, more emphasis is given to religion. Several schools are conducting internal experiments on curriculum reform.

Of the non-government schools most are associated with the Catholic church, a large number of these being co-educational primary schools. The remaining non-government schools, associated with other denominations or being under non-denominational control, are generally not co-educational. At the secondary level they include schools whose headmasters are members of the Headmasters Conference of the Independent Schools of Australia or whose headmistresses are members of the Association of Heads of Independent Girls' Schools of Australia.

The ultimate control of each of the non-government schools is independent of the State; the controlling body may be a council of representatives of a church or of interested men and women, or if under control of a religious order, as are many Catholic schools, the controlling body in Victoria of the order.

A major change in non-government schools has occurred since the provision of science grants for schools, in the first instance by the Industrial Fund for the Advancement of Scientific Education in Schools, and later by the Commonwealth Government in 1964. In 1964 Commonwealth legislation provided for \$10m to be spent annually (on a per capita basis) to provide adequate science laboratories and equipment in government and non-government schools throughout Australia. Previous to those grants relatively few non-government schools could afford the provision of expensive laboratories and equipment. The Commonwealth Government announced in its 1968 Budget that over a three year period commencing on 1 January 1969, it would provide \$27m to assist State Government and independent schools to raise the level of secondary school libraries to a standard necessary to enable them to be effective centres of the schools' learning programmes. Grants are available for the erection, alteration, or extension of library buildings and for their furnishings. Government schools were allocated \$1,880,000 per year, Roman Catholic schools \$413,800, and other independent schools \$326,200. In 1965 the State Government legislated to provide an interest subsidy on capital loans raised by non-government schools for new buildings and in 1967 gave annual grants to schools on a per capita basis. In 1971 the grants were \$20 per pupil at primary level and \$40 per pupil at secondary level. During the same period Commonwealth Government annual grants to non-government schools were at the rate of \$35 per pupil at primary level and \$50 per pupil at secondary level. These grants must be used by a school for recurrent expenses, and are not available for capital undertakings. Further details of Commonwealth aid are contained on pages 435-40.

Catholic education

Administration

The general administration and organisation of Catholic education is primarily on a diocesan basis, the four dioceses of the State being Melbourne, Ballarat, Sale, and Sandhurst, under direction of the Bishop who appoints his own administrative officers. A new administrative pattern came into operation in Melbourne in May 1969. In due course, some similar structure will probably be established in the other dioceses.

The Archbishop of Melbourne now exercises his authority in education through the Melbourne Catholic Education Board. This is a representative



Children at the ERA school, Donvale, a new independent school opened in 1971.

Education Reform Association

The Ferntree Gully High School, one of several new outer suburban government schools.

Education Department





The new Arts Building at the University of Melbourne.
Wolfgang Sievers



Students at work in the senior printing studio at the National Gallery of
 Victoria Art School.

National Gallery of Victoria Art School

board of fifty-one members with an episcopal vicar for education as chairman, an executive of seven, twelve priest and twelve parent members elected on behalf of a regional division of the diocese, and twenty representatives of religious teachers, lay teachers, and catechists. The function of the Board is to serve as a channel of communication between all parties involved in Catholic primary and secondary education and to participate in decision making in all matters relating to the Christian education of the Catholic children of the diocese. The Catholic Education Office acts as the secretariat of the Board, its director being secretary to the Board. It administers the policies of the Board in the Melbourne Archdiocese and serves as a channel of communication in educational matters for the remainder of the State. The staff of the Catholic Education Office was expanded during 1970 by the appointment of two Survey and Planning Officers, a Staffing Officer, a Secondary Curriculum Officer, and an Assistant Director of Primary Education. In addition, the Confraternity of Christian Doctrine has been established to assist the Office in the work of conducting catechetical instruction in government schools.

In conjunction with the re-organisation outlined above, all parishes, regional colleges, and diocesan schools have established their own boards which shape and administer educational policy at the local level. These boards have been nominated as the proper authority to receive and account for government educational grants. All other schools remain the responsibility of religious orders. They operate in co-operation with the Melbourne Catholic Education Board while maintaining their independent status.

Relationship with State authorities

All Catholic schools and their staffs are required to be registered by the Council of Public Education and are subject to inspection by officers of the Education Department who act on behalf of the Council. When teachers are ineligible for registration they may teach only with permission from the Council and on condition that no registered teacher is available. This permission is granted for one year only.

Although the Government takes no direct responsibility for the staffing and organisation of Catholic schools beyond the above regulations it assists them in matters of finance. Per capita grants towards operational costs are made by Commonwealth and State Governments for all pupils in Catholic and other registered schools. These amount to \$55 per annum for primary school pupils and \$90 per annum for those pupils in secondary schools.

Further aid is available in the form of science and library grants, transport allowances, interest subsidies, scholarships, and subsidies for teacher training institutions. Dental and medical services are also provided for Catholic schools by the Government. Despite these grants the financing of Catholic schools depends substantially on support from the Catholic community at primary school level and on school fees at the secondary school level.

Staffing

In the early days of Catholic education in Victoria schools were staffed by lay teachers. The first religious orders came in the 1850s. From the *Education Act* 1872 until the end of the Second World War teaching was almost entirely in the hands of religious. The expansion of the system

following the Second World War saw the introduction of lay staff in increasing numbers. At the present time the majority of teachers are lay. Schools in some areas, where religious teachers are unavailable, are entirely lay-staffed, and in 1970 three male lay teachers were appointed as principals of parish primary schools. For the most part lay teachers are trained in Catholic teachers colleges, although a considerable number are recruited from outside the system. There is no provision at present for the training of male lay teachers in Catholic teachers colleges.

Activities

Catholic education in Victoria falls into the following main divisions :

Pre-school. At the end of 1971 there were seventeen kindergartens conducted under the auspices of the Catholic church in Victoria. They are open by law to all applicants independent of their religious affiliations. These kindergartens are subsidised by the Department of Health and are subject to the regulations of that Department.

Primary. Virtually every parish in the State conducts at least one primary school. With a few exceptions these schools provide for children from beginners through to Grade 6. In addition to parish primary schools there are primary grade children in special schools, e.g., for the deaf, the blind, and the severely retarded, and in private preparatory schools.

Secondary. For the most part, Catholic secondary schools are owned and maintained by religious orders which finance their schools by charging fees. They cater for boarders as well as day students in many cases. A recent development has been the establishment of regional secondary colleges of which there are now eighteen. In these cases several parishes co-operate to build and finance a school on a convenient site, and engage a religious teaching congregation to conduct the school on their behalf.

Tertiary. The main emphasis is on primary teacher training. The three major colleges at Ballarat, Oakleigh, and Ascot Vale cater for more than 500 female students and several smaller colleges cater for the training of members of religious congregations. In addition several theological colleges provide for the education of students for the priesthood. There are university colleges and halls of residence at Melbourne and Monash universities.

Catechetical. Until recently Catholic schools catered for almost all Catholic children, but during the early 1970s the number of Catholic children in State schools rose sharply to more than 80,000 in 1971. The religious education of these pupils is undertaken by a team of religious who are assisted on a part-time basis by priests and voluntary catechists.

Courses of study

A limited number of schools provide experimental courses. For the most part, however, schools follow the courses of study recommended by the Victorian Education Department and the Victorian Universities and Schools Examinations Board.

Further references, 1962-71

Particulars of Victorian registered schools (excluding business and coaching colleges) are shown in the following tables. In these tables numbers of pupils refer to the school census date (1 August or the Monday nearest each year) and ages of pupils refer to age last birthday at census date.

VICTORIA—NUMBER OF REGISTERED SCHOOLS AND TEACHERS

Particulars	Number of schools					Number of teachers				
	1966	1967	1968	1969	1970	1966	1967	1968	1969	1970
Denominational—										
Roman Catholic	483	482	483	479	487	4,482	4,696	4,950	5,126	5,665
Church of England	33	35	35	35	35	1,063	1,114	1,188	1,209	1,290
Presbyterian	14	14	14	11	11	577	623	648	578	622
Methodist	4	4	4	4	4	259	285	303	290	301
Other	27	27	27	27	28	409	437	498	507	529
Undenominational	18	16	16	16	16	291	283	310	297	309
Total	579	578	579	572	581	7,081	7,438	7,897	8,007	8,716

VICTORIA—REGISTERED SCHOOLS: NUMBERS OF PUPILS BY SCHOOL DENOMINATION

At census date—	Denominational						Un-denominational	Total enrolments
	Roman Catholic	Church of England	Presbyterian	Methodist	Other	Total denominational		
1966	145,237	15,522	8,296	4,146	5,913	179,114	3,741	182,855
1967	146,844	16,195	8,441	4,153	6,197	181,830	3,692	185,522
1968	149,286	16,328	8,515	4,206	6,483	184,818	3,755	188,573
1969	149,796	16,618	8,379	4,258	6,652	185,703	3,749	189,452
1970	150,602	17,039	8,317	4,243	7,029	187,230	3,798	191,028

VICTORIA—REGISTERED SCHOOLS: SCHOOL DENOMINATION: AGES OF PUPILS, 1970

Age last birthday at 1 August 1970 (years)	Denominational						Un-denominational	Total enrolments
	Roman Catholic	Church of England	Presbyterian	Methodist	Other	Total denominational		
Under 6	11,477	565	178	76	406	12,702	291	12,993
6	13,815	592	230	71	423	15,131	204	15,335
7	14,380	574	283	52	448	15,737	246	15,983
8	14,652	691	312	90	449	16,194	222	16,416
9	14,636	808	346	143	487	16,420	241	16,661
10	14,735	949	369	174	479	16,706	266	16,972
11	14,342	1,152	523	236	543	16,796	296	17,092
12	12,200	1,906	982	487	693	16,268	339	16,607
13	10,909	1,910	976	508	686	14,989	363	15,352
14	10,084	2,105	1,096	578	661	14,524	358	14,882
15	8,653	2,050	1,065	627	696	13,091	333	13,424
16	6,357	1,923	1,005	615	599	10,499	328	10,827
17	3,496	1,376	756	446	356	6,430	259	6,689
18	770	387	166	114	88	1,525	45	1,570
19 and over	96	51	30	26	15	218	7	225
Total	150,602	17,039	8,317	4,243	7,029	187,230	3,798	191,028

VICTORIA—REGISTERED SCHOOLS: AGES OF PUPILS

Age last birthday (years)	At census date—				
	1966	1967	1968	1969	1970
Under 6	13,544	13,467	13,222	12,731	12,993
6	15,777	15,809	15,596	15,404	15,335
7	16,741	16,387	16,276	16,220	15,983
8	16,372	16,815	16,779	16,630	16,416
9	16,337	16,493	16,732	16,573	16,661
10	16,125	16,328	16,708	16,789	16,972
11	16,344	16,392	16,840	16,979	17,092
12	15,596	15,994	16,296	16,283	16,607
13	14,901	14,849	15,109	15,335	15,352
14	13,765	14,343	14,300	14,636	14,882
15	11,760	12,148	12,968	12,942	13,424
16	8,973	9,385	9,987	10,472	10,827
17	4,952	5,500	5,963	6,407	6,689
18	1,455	1,362	1,551	1,757	1,570
19 and over	213	250	246	294	225
Total	182,855	185,522	188,573	189,452	191,028

A comparison between pupils enrolled in government schools (excluding senior technical) and registered schools for the five years 1966 to 1970 is shown in the following table :

VICTORIA—STATE AND REGISTERED SCHOOLS: PUPILS ENROLLED

At census date—	State schools	Registered schools	Total enrolments
1966	523,786	182,855	706,641
1967	540,281	185,522	725,803
1968	555,838	188,573	744,411
1969	572,125	189,452	761,577
1970	585,440	191,028	776,468

The pupils enrolled and ages of pupils in government schools (excluding senior technical) and registered schools for the five years 1966 to 1970 are shown in the following table :

VICTORIA—STATE AND REGISTERED SCHOOLS : PUPILS ENROLLED : AGES OF PUPILS

Age last birthday (years)	At census date—				
	1966	1967	1968	1969	1970
Under 6	61,149	62,160	62,214	61,422	61,113
6	64,476	66,831	67,373	67,363	67,578
7	65,046	65,101	67,472	68,378	68,569
8	63,221	65,659	65,596	68,307	68,983
9	62,386	63,679	65,807	66,102	68,627
10	61,644	62,948	64,284	66,260	67,228
11	60,997	62,416	63,756	65,134	67,301
12	58,267	60,510	62,149	62,750	64,605
13	59,645	59,281	60,846	62,922	63,998
14	56,514	58,524	58,703	60,975	62,573
15	45,374	46,947	49,900	50,387	52,574
16	29,620	31,564	33,796	36,445	37,288
17	13,733	15,619	17,181	18,898	19,957
18	3,779	3,818	4,530	5,242	5,084
19 and over	790	746	804	992	990
Total	706,641	725,803	744,411	761,577	776,468

Victorian Universities and Schools Examinations Board

The Victorian Universities and Schools Examinations Board was created in 1960 for the purpose of establishing uniformity of university entrance requirements for the universities in Victoria. The Board consists of representatives of the universities, the Department of Education, registered secondary schools, and the commercial and industrial interests of the community. Because it has prescribed the details of courses for the school Leaving and Higher School Certificate (previously Matriculation) Examinations, which have been the university entrance requirements, it has had considerable influence over the courses of study used by the secondary schools of Victoria.

Since 1967 the Board has conducted an extensive survey among school and university teachers into the fifth form (Leaving) and sixth form (Higher School Certificate) examinations. The results of the survey were very inconclusive and showed that there was a great diversity of opinion about the role of examinations and the form they should take. Only on one topic was there general agreement. There was a clear majority which considered that there was no need for the School Leaving Examination to continue to be conducted by the Board. University teachers expressed the view that it was no longer necessary for candidates to complete certain subjects of the examination before entering for the university entrance examination (from 1970 entitled the Higher School Certificate instead of the Matriculation Examination). School teachers clearly indicated that they considered that the first five years of secondary education should be the responsibility of the secondary school and that they should be able to determine the kind of education most suitable for the needs and interests of their students and also the methods of assessing their progress and attainment.

After careful consideration of these views the Board agreed that eventually students in secondary schools should not be required to sit for the School Leaving Examination either externally or internally. However, it recognised that the School Leaving Examination certificate of results had been used for many years by post-secondary educational institutions and by employing organisations as a necessary or desirable qualification for entry. The Board also accepted the fact that many schools would not be prepared nor would desire to dispense with the Leaving Examination immediately. It, therefore, decided that the abolition of the examination for secondary students in schools should be carried out in stages so that the community and the schools would have time to adjust to the change.

The following stages have been planned. First, the requirement that students should pass in certain groups of subjects at the School Leaving Examination has been abolished. Candidates need to pass in any four subjects before they can proceed to the Higher School Certificate Examination from 1971 or provided that they receive the recommendation of the principal of their school. The approval of the principal is the important new condition which gives greater responsibility to the schools.

The second stage in increasing the responsibility of the schools was to make possible three different ways by which candidates could qualify for entrance to the Higher School Certificate Examination. As in the past, candidates could sit for the external examination either as students in schools which preferred to use this examination or as persons who no

longer attended full-time day school. Second, schools could be accredited by the Board to conduct their internal assessment of students provided they fulfilled certain conditions. The most radical change was to state that if any school did not wish to use the School Leaving Examination at all and issued its own fifth form certificates, the Board would accept the recommendations of its principal that students were qualified to enter for the senior examination. The object of this third possibility was to make it possible for schools to be free from direction by the Board at the fifth form level. The most important issue it has raised is the acceptance of school certificates instead of the Board's certificates for purposes of employment or entry to post-secondary educational institutions. As more and more schools decide to conduct their own educational assessment and to issue their own certificates the community will need to learn to rely on the professional evaluation of the progress and development of students by school principals and secondary teachers.

For the time being the Board is not planning any changes in the Higher School Certificate (previously Matriculation) Examination because of experiments being carried out with the Tertiary Education Entrance Project and the Australian Scholastic Aptitude Test. It will be necessary to carry out investigations between 1970 and 1975 to study the validity of these tests and to consider the ways in which they might be used in determining selection for entrance to universities and other tertiary institutions.

Meanwhile the Research Section of the Board continues to carry out investigations into the validity and reliability of examinations to study methods of improving them for the benefit of both the universities and the schools.

Statistics of Higher School Certificate Examinations for the years 1966 to 1970 are as follows :

VICTORIA—HIGHER SCHOOL CERTIFICATE EXAMINATION

Candidates	1966	1967	1968	1969	1970
Total entries	21,446	22,869	24,989	28,135	30,404
Number who attempted to pass fully	12,296	12,898	14,617	16,932	18,756
Number who passed fully	8,096	8,628	9,701	10,987	12,467
Percentage who passed fully	65.8	66.9	66.4	64.9	66.5

Further references, 1967–1971 ; Public examinations, 1963–1966

University of Melbourne

The University of Melbourne was established by an Act of the Victorian Parliament on 22 January 1853. Under the original Act and subsequent amending legislation up to 1971 the University consists of and is governed by Convocation (the body of graduates) and a Council of thirty-five members representing the Victorian Government, the graduates, the teaching staff, the undergraduates, and the university colleges, with wide powers for the conduct of university affairs. The general academic administration of the University is conducted by a Professorial Board, and the supervision of individual courses by Faculties and Boards of Studies. The University site occupies 106 acres of land in Parkville.

Chairs

Chairs maintained at the University either out of general revenue or from endowments include the following : Accounting (G. L. Wood Professor), Agriculture, Anatomy, Applied Mathematics, Architecture (*The Age* Professor), Bacteriology, Biochemistry, Botany and Plant Physiology, Chemistry, Child Health, Civil Engineering, Classical Studies, Commerce (Sidney Myer Professor), Commercial Law, Conservative Dentistry, Dental Medicine and Surgery, Dental Prosthetics, Economics (Truby Williams Professor), Economic History, Education, Electrical Engineering, English Language and Literature, Experimental Neurology, Fine Arts (*The Herald* Professor), French, Geography, Geology and Mineralogy, Germanic Languages, History, History (Ernest Scott Professor), Jurisprudence, Mechanical Engineering, Medicine, Medicine (James Stewart Professor), Metallurgy, Music (Ormond Professor), Obstetrics and Gynaecology, Ophthalmology, Organic Chemistry, Oriental Studies, Pathology, Pharmacology, Philosophy, Physics (Chamber of Manufactures Professor), Physiology, Political Science, Psychiatry, Psychology, Public Law, Pure Mathematics, Semitic Studies, Statistics, Surgery (James Stewart Professor), Veterinary Science, and Zoology. Research chairs have been established in Economics (Ritchie Professor), Experimental Medicine, and Metallurgy.

In addition, other departments (under the charge of an associate-professor, senior lecturer-in-charge, or other officer) include Anthropology, Criminology, Forestry, History and Philosophy of Science, Indian, East Southeast Asian Studies, Industrial Relations, Journalism, Languages (Science Course), Medical Jurisprudence, Meteorology, Microscopy, Mining, Physical Education, Russian, Social Studies, Surveying, and Town and Regional Planning.

Fees

The annual fees payable to the University by a student vary according to the course undertaken. Fees include a Union fee payable by all students who are thereby entitled to share in the corporate and social activities centred around the University Union. The students, through their Students' Representative Council, have a large measure of self-government in all matters concerning the University Union.

Students may obtain financial assistance in many ways. Scholarship schemes based on academic merit are provided by the Commonwealth and State Governments and there is also a large number of scholarships provided by private foundations. In addition, the University makes loans in approved cases out of the Students' Loan Fund. In 1971, 74 per cent of all students were receiving some form of financial assistance. The largest group was that of Commonwealth Scholarship holders (5,812); another 1,880 students held Victorian Education Department Studentships which are granted to students who undertake to enter the teaching service on completion of their courses and to teach for a period of at least three years.

Student enrolment

The following tables show the number of full-time, part-time, and external students and enrolments in the various faculties for the five years 1967 to 1971:

VICTORIA—UNIVERSITY OF MELBOURNE: STUDENTS ENROLLED,
CLASSIFIED BY SEX AND TYPE OF COURSE(a)

Year	Full-time		Part-time		External		Total	
	Males	Females	Males	Females	Males	Females	Males	Females
1967	6,760	2,947	2,803	1,220	300	121	9,863	4,288
1968	6,970	2,764	2,774	1,187	216	81	9,960	4,032
1969	6,686	3,116	3,219	1,276	150	51	10,055	4,443
1970	6,800	3,282	3,220	1,260	127	37	10,147	4,579
1971	6,999	3,509	3,044	1,255	117	26	10,160	4,790

(a) 1967 figures refer to enrolments up to 31 July; 1968 and 1969 to enrolments up to 30 June; and 1970 and 1971 to enrolments up to 30 April.

VICTORIA—UNIVERSITY OF MELBOURNE: ENROLMENTS
CLASSIFIED BY FACULTIES(a)

Faculty	1967	1968	1969	1970	1971
Agricultural science	268	264	284	306	298
Applied science	153	165	200	142	156
Architecture	646	625	628	584	538
Arts	3,693	3,714	3,731	3,666	3,746
Commerce	1,643	1,738	1,818	1,843	1,816
Dental science	261	246	274	274	267
Education	697	639	660	707	714
Engineering	958	1,002	1,012	1,089	1,125
Journalism	53	62	65	58	18
Law	1,226	1,298	1,288	1,287	1,316
Medicine	1,114	1,141	1,203	1,244	1,302
Music	253	269	283	284	302
Physical education	180	188	198	199	195
Science	2,341	2,386	2,633	2,798	2,911
Social studies	299	336	313	340	360
Town and regional planning	132	160	176	210	234
Veterinary science	234	232	257	252	264
Student total	14,151	(b)13,992	(b)14,498	(b)14,726	(b)14,950

(a) 1967 figures refer to enrolments up to 31 July; 1968 and 1969 to enrolments up to 30 June; and 1970 and 1971 to enrolments up to 30 April.

(b) In 1968 and succeeding years, students taking combined courses are counted in each faculty, and accordingly the sum of faculty enrolments exceeds the student total shown at the foot of the table.

Since the war many Asian students have been admitted to Australian educational institutions. Enrolments of Asian students at the University of Melbourne have increased from 100 in 1949 to 420 in 1971, of whom 38 were studying on Colombo Plan Scholarships. All south-east Asian countries are represented as well as India, Ceylon, Hong Kong, the Philippine Islands, and Fiji.

The following table shows the number of degrees conferred in faculties of the University of Melbourne from 1966 to 1970. In addition to degrees shown below, some faculties grant diplomas for certain subgraduate and postgraduate courses.

VICTORIA—UNIVERSITY OF MELBOURNE : DEGREES
CONFERRED IN FACULTIES

Faculty	1966	1967	1968 (a)	1969 (a)	1970 (a)
Agricultural science	38	37	46	60	65
Architecture	86	80	73	91	88
Arts	551	648	646	714	671
Commerce	258	271	263	324	304
Dental science	32	40	47	47	31
Education	74	68	89	74	66
Engineering	178	200	167	201	189
Law	183	192	201	208	180
Medicine	173	169	170	162	189
Music	27	30	29	34	29
Science	441	441	458	471	466
Veterinary science	1	1	40	41	44
Total	2,042	2,177	2,229	2,427	2,322
Bachelors' degrees	1,852	1,986	1,993	2,187	2,039
Higher degrees	190	191	236	240	283

(a) Before 1968, figures relate to year ended 31 July. Figures for 1968 are for eleven months ended 30 June. Figures for 1969 and 1970 are for twelve months ended 30 June.

Master plan for University of Melbourne

During 1968 the Vice-Principal of the University collected information in the U.S.A. on planning concepts and techniques, with particular reference to universities on limited urban sites. In August of that year the University wrote to a number of planning firms requesting proposals for a survey to be used as a basis for a master plan and envisaging the use of modern techniques. A recommendation was submitted to set up a planning framework which could be progressively computerised, into which survey information could be fed as it became available. This recommendation was adopted, and in December 1968 the firm which had made the recommendation was appointed Master Planner to control the development of the programme. At the same time it was decided to seek separate research funds for a long-term computer research project to be run in conjunction with the planning programme. The organisation of the master plan (approved in principle in 1968) provides for surveys to be carried out from time to time as required. Work completed by 1971 included surveys which the University Buildings Branch has carried out itself (Space Inventory and Proximity Relations) as well as those which it has commissioned from specialist consultants (Subsoil Survey, Aerial Site Survey, Parking, and Traffic Study).

The Master Planner brought out an Interim Report in October 1969, dealing with planning principles and locating the buildings in the 1970-1972 triennium's Capital Buildings Programme. The first full report in 1971 showed the building programme for 1973-1975 as well as projections into future triennia.

The master planning procedure is threefold. First, broad planning principles are set up. Second, data relevant to the problem in hand is collected. Third, principles are applied to the data, to achieve a specific

plan for the circumstances at that particular time. Once the first step is successfully completed (that is, the broad principles have been stated and endorsed) the plan can be updated as often as necessary by the repetition of the second and third steps. It is in these two steps that the computer can be most usefully applied.

Whether computerised or not, the procedure combines the maximum of tactical flexibility with a consistent overall strategy. The key to the success of the whole plan is the first step of setting up firm guiding principles, and the major ones advocated are as follows :

1. *Expand the site.* The present site of 47 acres must be enlarged to give a low density zone around the central area. For economic reasons the expansion will be mainly into Carlton and the area south of Grattan Street adjacent to University Square.

2. *Develop the centre intensively.* The limit of desirable size is derived from the walking distance between two points ; therefore, the " pavilions in a park " concept of university planning is self-defeating. Inevitably buildings appear in the gaps and the park-like character is replaced by the suburban limbo, neither town nor country, which is a most inefficient way to use land.

3. *Court-form buildings.* In terms of land use continuous building around courts is now considered to be far more efficient than any other building form. High density does not have to mean high-rise ; for instance four-storey buildings around courts not less than 88 ft wide give a plot ratio in excess of 2 : 1, which is higher than in any other Australian university. Minimum court width is a function of building height, based on the desirability of year-round sunlight. Once a minimum size has been defined by the height of surrounding buildings, it is an inviolable principle that no further gap-filling may take place. There are, of course, other considerations in fixing the size of courts, such as the need for variety, the preservation of traditional areas such as the System Garden and the Union Lawn, and the creation of major pedestrian precincts at or near the centre. Courts are designed to be " outdoor rooms " and therefore places for living. They also give wind protection and in this context the South Lawn presents a special problem. The Master Planner's recommended solution is to create a major quadrangle south of the original quadrangle buildings by removing roads and parking, raising it to a uniform level, landscaping, and surrounding it with buildings of appropriate scale and character.

4. *Traffic segregation.* As far as possible the centre should become a traffic-free pedestrian precinct. Casual parking in the grounds should be replaced by concentrations near the entrances, or removed to external parking stations, and internal traffic movement should be rationalised and reduced.

The principle of court-form buildings has been accepted by the University Council and future buildings are being located in accordance with it. Acceptance of the principle does not commit the University in advance to particular applications, and each updating of the plan requires agreement in detail.

Finance

Income and expenditure for the years 1965 to 1969 are shown in the following table :

VICTORIA—UNIVERSITY OF MELBOURNE: INCOME AND EXPENDITURE
(\$'000)

Particulars	1965	1966	1967	1968	1969
SOURCE OF INCOME					
Commonwealth Government	7,005	8,279	9,297	9,389	9,160
State Government	6,511	10,097	7,630	9,396	11,959
Total Government grant	13,516	18,376	16,927	18,785	21,119
Other sources—					
Donations and special grants	1,070	1,269	1,190	1,201	1,248
Student fees	3,141	3,187	3,752	3,729	3,819
Public examination fees	45	52	54	54	57
Other fees	61	73	88	107	131
Endowment income	365	291	412	418	442
Charges for services	297	402	301	375	480
Halls of residence	127	139	204	218	204
Other income	296	455	459	546	757
Total other sources	5,403	5,868	6,460	6,647	7,138
Total income	18,918	24,244	23,387	25,431	28,257
NATURE OF EXPENDITURE					
Teaching and research—					
Salaries and superannuation	9,555	9,460	10,221	11,425	12,218
Equipment and maintenance	1,580	1,871	2,120	2,068	1,957
Research scholarships, fellowships, and study leave	755	925	1,026	1,021	692
Other teaching and research expenditure	689	937	921	1,065	1,171
Total teaching and research	12,579	13,193	14,288	15,579	16,038
Administration and general overhead—					
Salaries and superannuation	760	983	1,156	1,347	1,502
Other administration expenditure	410	480	528	559	691
Libraries—					
Salaries and superannuation	362	415	435	471	533
Other expenditure on libraries	400	418	367	438	527
Buildings, premises, and grounds—					
New buildings	1,737	2,871	4,529	3,381	3,120
Repairs and maintenance, including salaries and superannuation	1,273	1,233	1,311	1,557	1,523
Rents, rates, power, lighting, and heating	269	318	371	442	454
Other expenditure on buildings, etc.	170	391	537	141	366
Sundry auxiliary expenditure—					
Public examinations	35	43	50	50	53
Other expenditure	981	1,086	1,217	1,451	1,566
Total expenditure	18,975	21,431	24,789	25,416	26,373

Enrolment problems, 1962; University of Melbourne Medical School 1862 to 1962, 1963; Department of Child Health, 1963; Postgraduate education, 1964; University of Melbourne Library, 1964; Affiliated residential colleges, 1966; Employment of graduates, 1967; Research in Victorian universities, 1968; University of Melbourne Medical School, 1970; University of Melbourne Veterinary School, 1971

Monash University

Monash University, established on 15 April 1958 and named after Sir John Monash, a distinguished Victorian, is situated at Clayton, 12 miles from the centre of Melbourne and near the main arterial highway linking

Melbourne with eastern Victoria. This hitherto undeveloped site provided the opportunity of adopting a master plan for the whole of the physical development of the University. Within a surrounding belt of trees securing its privacy, the University is served by a perimeter road. Areas between the buildings are being developed with paving, lawns, rocks, and ponds. Trees which were already growing on the site were retained as far as possible. A comprehensive scheme of planting, largely of native plants, closely follows the completion of each group of buildings, and a thicket of native vegetation in a gully to the north-east has been preserved as a wild-life reserve. Parking facilities for some 3,000 cars have been planned. The whole conception is of buildings arranged around three sides of the campus and partly enclosing a pedestrian precinct open to the east.

The University was opened on 11 March 1961, three years earlier than originally envisaged, and teaching began with an enrolment of 363 undergraduates and graduates in the Faculties of Arts, Economics and Politics, Engineering, Medicine, and Science. Enrolments rose to 11,034 in 1971, and it is intended that the University should reach a total of 12,000 students and that as many full-time students as possible will be housed in halls of residence, the first of which was opened in 1962. The University offers the degrees of Bachelor, Master, Doctor of Philosophy, and higher Doctorates, and conferred its first Bachelor degrees at the beginning of the 1964 academic year.

Buildings and accommodation

Building work has proceeded in accordance with the master plan established at the outset and by the end of 1970 major projects in the University to the value of more than \$33.6m were either completed or under construction. The following building projects now in progress will be completed during 1971-72: Robert Blackwood Hall, stages 1 and 2; fourth and fifth halls of residence; extensions to Hargrave Library; biochemistry building; extensions to Menzies building; and physics, chemistry, and engineering buildings. Clinical and para-clinical facilities in teaching hospitals affiliated with Monash are expected to cost \$4.5m in addition to grants made by the Hospitals and Charities Commission. The major project, the medical school building at the Alfred Hospital, has been completed at a total cost of \$2.3m. In order to provide teaching facilities for Monash medical students, buildings have also been completed at the Queen Victoria and Prince Henry's Hospitals. Clinical teaching is given at these hospitals and at the Royal Children's Hospital, Royal Park Psychiatric Hospital, and Fairfield Hospital. Plans for the proposed Monash Medical Centre began in 1966 and are proceeding.

The Alexander Theatre, a public lecture theatre commemorating Samuel Alexander, the Australian philosopher, has a capacity for over 700 persons. It has been designed to allow for many different uses and is one of the most flexible auditoria in the State.

At the Jock Marshall Zoology Reserve, which contains dense native vegetation and covers an area of eight and a half acres, including an artificial lake of four acres, research projects are carried out on the behaviour and physiology of Australian wildlife, in some cases using telemetry techniques. There are numerous species of birds to be found

in the reserve including the brush turkey and the rare Cape Barren goose, both of which breed there, the bower bird, bell bird, wagtail, and various species of water birds. Other animals in the reserve include the koala, echidna, wombat, bandicoot, pademelon, blacktailed wallaby, red kangaroo, grey kangaroo, and marsupial rat. The Jock Marshall reserve is being used as a centre for the propagation of the white-throated or Parmar wallaby which has become extinct in Australia although a few introduced animals still survive in New Zealand.

The Religious Centre, with a seating capacity of 420, is a gift to the University by the Christian churches and the Jewish community, and provides a place of worship for members of many faiths. The unity of thought behind the whole conception is emphasised by the circular plan of the Centre with its radial vestries and meeting places.

Monash University Library

The Monash University Library has approximately 415,000 volumes, and subscribes to some 8,500 periodicals. These are housed in four main locations: the Main Library, catering largely for arts, economics, politics, and education; the Hargrave Library, for the physical sciences and engineering; the bio-medical library, which serves the Faculty of Medicine and the departments of zoology, botany, genetics, and psychology; and the law library.

Halls of residence

The University has three halls of residence, known as the North-East Halls, each taking both men and women. The halls are non-denominational, and are designed to accommodate 600 persons. The central building of the complex provides facilities for dining halls, serveries, a kitchen, an administrative centre, and a limited number of staff quarters. The total cost of the project was \$2.2m. A fourth hall of residence, accommodating 176 students and operating independently of the North-East Halls, was opened in 1971, and a fifth (176 students) is planned for completion in 1972.

Faculties

At present there are seven faculties each with a full-time Dean: Arts, Economics and Politics, Education, Engineering, Medicine, Science, and Law. At a later date a Faculty of Architecture will be established.

Chairs

Appointments have been made to the following chairs:

Faculty of Arts. Anthropology and Sociology (2); Classical Studies; English (2); French (2); Geography; German; History (3); Indonesian and Malay; Japanese; Linguistics; Music; Philosophy (2); Russian. *Faculty of Economics and Politics.* Accounting; Administration; Agricultural Economics; Econometrics; Economics (4); Economic History; Politics (2).

Faculty of Education. The K. S. Cunningham Chair of Education (Experimental Education); the Ian Clunies Ross Chair of Education (Science Education); Education (4).

Faculty of Engineering. Chemical Engineering; Civil Engineering (2) (Structural Engineering and Materials Science); Electrical Engineering (2); Mechanical Engineering (2) (Fluid Mechanics and Engineering Dynamics).

Faculty of Law. The Sir Isaac Isaacs Chair of Law ; the Sir John Latham Chair of Law ; the Sir Leo Cussen Chair of Law ; the Sir Haydn Starke Chair of Law ; the Sir Owen Dixon Chair of Law ; the Sir Henry Bournes Higgins Chair of Law.

Faculty of Medicine. Anatomy ; Biochemistry (2) ; Medicine (2) ; Microbiology ; Obstetrics and Gynaecology ; Paediatrics ; Pathology ; Physiology (2) ; Psychological Medicine ; Social and Preventive Medicine ; Surgery (2).

Faculty of Science. Applied Mathematics (2) ; Botany ; Chemistry ; Genetics ; Information Science ; Inorganic Chemistry ; Organic Chemistry ; Mathematical Statistics ; Physics ; Psychology (2) ; Pure Mathematics (3) ; Theoretical Physics ; and Zoology.

University entrance

The normal entrance requirement for a student is to satisfy the matriculation requirements prescribed by the Victorian Universities and Schools Examinations Board. Except in the case of the Faculty of Arts and the Faculty of Medicine, there are no special faculty prerequisites, but in certain subjects it is assumed that Higher School Certificate standard has been reached.

Student enrolment

The following table shows full-time and part-time students at Monash University from 1967 to 1971 :

VICTORIA—MONASH UNIVERSITY : STUDENTS ENROLLED
CLASSIFIED BY SEX AND TYPE OF COURSE(a)

Year	Full-time		Part-time		Total	
	Males	Females	Males	Females	Males	Females
1967	4,051	1,750	897	419	4,948	2,169
1968	4,761	2,039	1,104	562	5,865	2,601
1969	5,161	2,312	1,425	644	6,586	2,956
1970	5,437	2,574	1,614	759	7,051	3,333
1971	5,577	2,782	1,822	853	7,399	3,635

(a) 1967 figures refer to enrolments up to 31 July; 1968 and 1969 to enrolments up to 30 June; and 1970 and 1971 to enrolments up to 30 April.

The following table shows undergraduate and postgraduate enrolments in the various faculties in 1970 and 1971 :

VICTORIA—MONASH UNIVERSITY : ENROLMENTS
CLASSIFIED BY FACULTIES

Faculty (a)	Up to 30 April 1970				Up to 30 June 1971			
	Undergraduate		Postgraduate		Undergraduate		Postgraduate	
	Males	Females	Males	Females	Males	Females	Males	Females
Arts	1,247	1,841	151	89	1,230	1,891	164	88
Economics and politics	1,356	289	187	12	1,290	306	212	21
Education	495	340	53	15	590	425	80	20
Engineering	841	9	111	2	934	14	127	..
Law	790	121	8	5	858	144	14	4
Medicine	748	161	27	6	747	182	28	5
Science	1,010	429	277	44	1,104	526	284	53
Total	6,487	3,190	814	173	6,753	3,488	909	191

(a) Some students are enrolled in more than one faculty. There were 280 taking combined courses in 1970 and 307 in 1971.

The following table shows the number of degrees conferred in the faculties of Monash University from 1966 to 1970. In addition to degrees shown below some diplomas are granted.

VICTORIA—MONASH UNIVERSITY : DEGREES
CONFERRED IN FACULTIES

Faculty	1966	1967	1968 (a)	1969 (a)	1970 (a)
Arts	185	285	398	490	544
Economics and politics	62	92	144	254	315
Education	..	3	11	26	26
Engineering	19	41	64	93	118
Law	..	34	60	130	173
Medicine	5	32	66	115	118
Science	45	67	182	247	306
Bachelors' degrees	299	530	887	1,268	1,490
Higher degrees	17	24	38	87	110
Total	316	554	925	1,355	1,600

(a) Before 1968, figures relate to year ended 31 July. Figures for 1968 are for eleven months ended 30 June. From 1969 figures are for year ended 30 June.

Finance

The University's funds are derived largely from the State and Commonwealth Governments, and from the academic fees paid by students. The State Government contributes equally with the Commonwealth to the cost of buildings and major items of equipment. With respect to recurrent expenditure, the Commonwealth contributes \$1 for every \$1.85 received through State grants and students' fees.

All full-time undergraduate students pay the same annual fee, irrespective of faculty. Fees payable by part-time students are based on the number of subjects taken in a year, whilst fees for postgraduate work are set at a level designed to encourage students to enrol for higher degrees.

Income and expenditure for the years 1965 to 1969 are shown in the following table :

VICTORIA—MONASH UNIVERSITY : INCOME AND EXPENDITURE
(\$'000)

Particulars	1965	1966	1967	1968	1969
SOURCES OF INCOME					
Commonwealth Government	5,071	4,852	5,495	6,245	8,484
State Government	6,528	6,342	6,846	7,798	9,850
Total Government grants	11,599	11,194	12,341	14,043	18,334
Other sources—					
Donations and special grants	756	695	663	810	451
Student fees	1,025	1,371	1,880	2,209	2,449
Other fees	..	10	5	11	9
Charges for services	41	38	117	259	237
Halls of residence	145	276	435	402	399
Other income	46	59	84	103	151
Total other sources	2,012	2,448	3,183	3,794	3,696
Total income	13,612	13,642	15,524	17,836	22,030

VICTORIA—MONASH UNIVERSITY: INCOME AND EXPENDITURE—*continued*
(\$'000)

Particulars	1965	1966	1967	1968	1969
NATURE OF EXPENDITURE					
Teaching and research—					
Salaries and superannuation	4,093	4,869	6,078	7,223	8,031
Equipment and maintenance	1,426	2,077	1,986	1,978	1,843
Research scholarships, fellowships, and study leave	251	428	608	779	707
Other teaching and research expenditure	238	266	423	458	718
Total teaching and research	6,008	7,640	9,093	10,439	11,299
Administration and general overhead—					
Salaries and superannuation	568	726	876	960	1,137
Other administration expenditure	357	377	446	472	527
Libraries—					
Salaries and superannuation	278	324	401	470	602
Other expenditure on libraries	295	370	485	542	711
Buildings, premises, and grounds—					
New buildings	3,946	1,822	2,364	3,857	4,095
Repairs and maintenance, including salaries and superannuation	700	684	642	803	947
Rents, rates, power, lighting, heating	177	213	238	291	319
Other expenditure on buildings, etc.	44	93	89	199	216
Sundry auxiliary expenditure	321	502	790	876	1,051
Total expenditure	12,693	12,752	15,424	18,908	20,902

Further references, 1966–1971 ; Medical School, Monash University, 1970 ; Centre of Southeast Asian Studies, 1971

La Trobe University

La Trobe University was established by an Act of the Victorian Parliament in 1964 and is named after the first Lieutenant-Governor of the State, Charles Joseph La Trobe. The University, which opened in March 1967, is being built on a 484 acre site at Bundoora, 9 miles north of the City of Melbourne. This land was made available by the State Government on the recommendation of the University Planning Committee established in July 1964. One of the first acts of the Interim Council which took over the responsibilities of the planning committee in December 1964 was to commission a firm of architects to prepare a master plan for the development of the site. This resulted in the adoption by the Interim Council of a concentric plan with a central "heart" consisting of the Library and a social-commercial centre known as the Agora containing a bookshop, post office, coffee shop, banks, and other amenities. The academic buildings are being constructed around this central area and the colleges of the University will form an arc to the east of the academic area. Working to this plan, buildings catering for the principal activities of the students and staff are being placed within a radius of a maximum of five minutes walking distance. There is no vehicular traffic inside this area, which is surrounded by a ring road separating it from car parks and sports fields.

In planning the overall development of the University, the Interim Council made a number of important decisions designed to lead to the emergence of a distinctive pattern of academic and social life suited to the needs of students and staff alike. At La Trobe all academic staff, senior

administrative and library officers, and all postgraduate and undergraduate students belong to a college, either as resident or as non-resident members. The master plan provides for the progressive construction of colleges to a maximum of ten, each having a membership of about 1,250, of whom at least 20 per cent are in residence. In addition to providing such residential accommodation, each college offers academic, social, dining, cultural, and recreational facilities for use by resident and non-resident members.

The academic organisation of the University is not based on the conventional faculties but on smaller units known as Schools, each responsible for the conduct of teaching and research in its own area. This more flexible arrangement is designed to encourage staff and students to engage in interdisciplinary studies. The first four Schools established in 1967 were Biological Sciences, Humanities, Physical Sciences, and Social Sciences. Since then the academic scope of the University has been widened by the establishment of a School of Agriculture in 1968 and a School of Education in 1970. By early in the 1971 academic year the following foundation professors had been appointed: *School of Agriculture*—Agriculture; *School of Biological Sciences*—Botany, Genetics and Human Variation, Zoology; *School of Education*—Education; *School of Humanities*—English (2), French, History (3), Philosophy (2), Spanish; *School of Physical Sciences*—Chemistry (3), Mathematics (3), Physics (2); *School of Social Sciences*—Economics (3), Politics (2), Sociology (2).

The completion in 1971 of the second stage of the Library building brought the total of readers' places to approximately 1,800. At that time the Library contained 140,000 bound volumes and had subscriptions to over 4,000 serial titles including government publications.

The University does not contain a central students' union of the kind traditional to most Australian universities. Facilities normally provided in a union are dispersed amongst a number of colleges, each of which also provides residential accommodation for up to 400 undergraduate and postgraduate students. By 1972 three such colleges were planned to be opened and new ones will be developed to keep pace with the increase in enrolments. An alternative to college residence is provided for students living away from home in a block of 24 flats which the University built on the perimeter of the campus in 1969 and through other flats in neighbouring suburbs which the University leases. These housing projects are managed by La Trobe University Housing Limited which is a non-profit making company limited by guarantee.

The following table shows full-time and part-time enrolments at La Trobe University from 1967 to 1971 :

VICTORIA—LA TROBE UNIVERSITY :
STUDENTS ENROLLED (a)

Year	Full-time		Part-time		Total	
	Males	Females	Males	Females	Males	Females
1967	266	182	63	41	329	223
1968	549	358	172	84	721	442
1969	982	637	302	131	1,284	768
1970	1,187	818	349	165	1,536	983
1971	1,331	951	473	257	1,804	1,208

(a) 1967 figures refer to enrolments up to 31 July; 1968 and 1969 figures refer to enrolments up to 30 June; and 1970 and 1971 figures to enrolments up to 30 April.

The following table shows enrolments of students for bachelor degrees in the various Schools of the University from 1969 to 1971 :

VICTORIA—LA TROBE UNIVERSITY : BACHELOR DEGREE ENROLMENTS
CLASSIFIED BY SCHOOLS (a)

School	Degree course pursued									
	1969			1970			1971			
	Arts	Eco- nomics	Science	Arts	Eco- nomics	Science	Arts	Eco- nomics	Science	Edu- cation
Humanities	666	..	..	822	..	..	938	..	..	..
Social sciences	354	317	..	375	304	..	408	345	..	..
Physical sciences	..	..	273	..	..	347	..	..	390	..
Biological sciences	..	..	177	..	..	201	..	..	262	..
Agriculture	..	..	63	..	..	105	..	..	156	..
Education	..	..	..	..	..	..	..	..	..	52
Total	1,020	317	513	1,197	304	653	1,346	345	808	52

(a) 1969 figures refer to enrolments up to 30 June, and 1970 and 1971 figures to enrolments up to 30 April.

The first ceremony for the conferring of degrees awarded by the University took place in December 1969. The following table shows the number of degrees conferred for the years ended June 1970 and 1971 :

VICTORIA—LA TROBE UNIVERSITY :
DEGREES CONFERRED BY SCHOOLS

School	1970	1971
Humanities	70	132
Social sciences	56	113
Physical sciences	46	48
Biological sciences	14	25
Agriculture	..	..
Education	..	..
Total	186	318
Bachelor degrees	172	301
Higher degrees	14	17

In the first five years of its existence to December 1969 the University received government grants totalling \$16.5m for capital purposes. The only buildings available in 1967 when the first students enrolled were the first stage of the Library and one college. By the beginning of 1970 a second college had been opened, together with a lecture theatre block and six major teaching buildings for general science, biological sciences, chemistry, humanities, physics, and social sciences. For the three year period ending in 1972 a further \$13.7m was made available. The second stage of the Library was occupied in 1971 and in 1972 new facilities occupied included a third college, a lecture theatre to seat 500, and a large multi-purpose building to accommodate a number of academic and administrative activities.

The University's income and expenditure for the years 1965 to 1969 are shown in the following table :

VICTORIA—LA TROBE UNIVERSITY : INCOME AND EXPENDITURE
(\$'000)

Particulars	1965	1966	1967	1968	1969
SOURCE OF INCOME					
Commonwealth Government	482	1,720	1,558	3,713	4,141
State Government	375	2,099	3,122	3,796	3,818
Total government grants	857	3,819	4,680	7,509	7,959
Other sources—					
Donations and special grants	..	18	38	57	66
Other income	..	19	231	483	879
Total other sources	..	37	269	540	946
Total income	857	3,855	4,950	8,050	8,904
NATURE OF EXPENDITURE					
Teaching and research—					
Salaries and superannuation	..	141	692	1,149	1,727
Equipment and maintenance	..	56	58	39	78
Research scholarships, fellowships, and study leave	..	2	22	55	75
Other teaching and research expenditure	..	67	126	182	240
Total teaching and research	..	265	899	1,423	2,120
Administration and general overhead—					
Salaries and superannuation	27	161	238	415	460
Other administration expenditure	60	117	95	163	224
Libraries—					
Salaries and superannuation	33	85	163	242	287
Other expenditure on libraries	173	214	176	177	285
Buildings, premises, and grounds—					
New buildings	78	1,832	3,072	4,508	3,494
Repairs and maintenance, including salaries and superannuation	..	3	69	35	178
Rents, rates, power, lighting, heating	..	24	62	75	92
Other expenditure on buildings, etc.	164	759	950	861	694
Sundry auxiliary expenditure	..	4	96	240	380
Total expenditure	536	3,466	5,819	8,141	8,213

Further references 1966–1971 ; University development in Victoria, 1966 ; Research in Victorian universities, 1968

Victoria Institute of Colleges

The decisions by the Victorian and Commonwealth Governments in 1965 to undertake a large scale programme of development of the colleges of advanced education were accompanied by new policies concerning the system by which the colleges should be administered. Because a large number of institutions other than the universities in Victoria offer various forms of tertiary education, the Government of Victoria saw the need for the establishment of a body to co-ordinate and rationalise the projected developments in these institutions. In so doing, the Government endorsed the concept of an "institute of colleges" which had been proposed in 1965 in the recommendations of the Committee on the Future of Tertiary Education in Australia.

The Victoria Institute of Colleges was incorporated under State legislation in 1965. The role of the Institute, more specifically developed in later amending legislation, is to foster the development and improvement of institutions, other than the universities, offering tertiary education in

Victoria. The most important of the Institute's responsibilities include :

1. making recommendations to the Government on the financial requirements of the colleges ;
2. determining the staff establishments for the colleges ;
3. stimulating the improvement of academic standards in the colleges ;
4. awarding degrees, diplomas, and other awards to students of the colleges attaining appropriate standards in approved courses ; and
5. making recommendations to the Government on salary scales for college staffs.

VICTORIA—TERTIARY ENROLMENTS IN COLLEGES AFFILIATED WITH THE VICTORIA INSTITUTE OF COLLEGES

College	1970			1971		
	Full-time	Part-time	Total	Full-time	Part-time	Total
Metropolitan colleges—						
Caulfield Institute of Technology	1,362	1,802	3,164	1,651	2,059	3,710
Footscray Institute of Technology	804	949	1,753	979	1,094	2,073
Prahran College of Technology	439	265	704	519	298	817
Preston Institute of Technology	648	867	1,515	646	944	1,590
Royal Melbourne Institute of Technology	2,875	6,078	8,953	3,545	5,974	9,519
Swinburne College of Technology	1,876	2,575	4,451	1,892	2,267	4,159
Total metropolitan	8,004	12,536	20,540	9,232	12,636	21,868
Para-medical colleges—						
Occupational Therapy School of Victoria	130	..	130	140	..	140
Physiotherapy School of Victoria	168	..	168	167	..	167
Victorian School of Speech Science	80	..	80	85	..	85
Victorian College of Pharmacy	377	6	383	331	5	336
College of Nursing, Australia	67	..	67	98	..	98
Total para-medical	822	6	828	821	5	826
Country colleges—						
Ballarat Institute of Advanced Education	397	101	498	532	120	652
Bendigo Institute of Technology	439	209	648	640	247	887
Gippsland Institute of Advanced Education	222	129	351	301	147	448
Gordon Institute of Technology	768	353	1,121	923	412	1,335
Warrnambool Institute of Advanced Education	169	25	194	240	35	275
Total country	1,995	817	2,812	2,636	961	3,597
Total	10,821	13,359	24,180	12,689	13,602	26,291

The V.I.C. is not itself a teaching institution, but a co-ordinating agency with which individual autonomous colleges may become affiliated. It is governed by a council of thirty members, drawn from the affiliated colleges, the universities, Parliamentary representatives, the Education Department, commerce, and industry. Academic assessments are made by a Board of Studies, which is, in turn, advised by a series of Schools Boards and Course Development Committees in particular fields of study.

All colleges affiliated with the V.I.C. are governed by their own

autonomous councils. Many of these are long-standing corporate bodies which have had responsibility for their institutions from their inception. Other councils have been recently incorporated to manage the tertiary operations of those affiliated colleges which were formerly under the control of the Education Department. (These are the colleges at Caulfield, Footscray, Preston, Gippsland, and Warrnambool.) The affiliated colleges at present award diplomas and will continue to do so; the award of degrees is the prerogative of the V.I.C.

Ballarat Institute of Advanced Education

The Ballarat Institute of Advanced Education, the first institute of technical education to be established in Australia (as the Ballarat School of Mines in (1870)), has a long and distinguished educational record. It awarded the first diploma in Victoria (metallurgy in 1896) and the first engineering diploma (mining engineering in 1897). Because the district concerned itself principally with goldmining in the early years, the college's original object was to impart instruction in the various branches of mining technology. It provided training for mining engineers, surveyors, and assayers; but it soon became necessary to broaden its scope to cater for additional technical professions such as the various other branches of engineering, applied science, and geology. Progressively these courses became broader and more advanced, until the present diploma courses evolved.

A new tertiary section for the Institute is being erected on a 240 acre site at Mount Helen. Construction of the first teaching buildings has been completed. Buildings for other departments and a residential college will be erected during the 1970-1972 triennium.

The Ballarat Institute of Advanced Education now offers students diploma courses in art, business studies, applied chemistry, general studies, applied geology, metallurgy, applied physics, and mechanical, electrical, electronic, civil, and mining engineering.

Degree courses in applied science (applied chemistry and multi-discipline) have recently been introduced.

Bendigo Institute of Technology

The Bendigo Institute of Technology (formerly the Bendigo School of Mines) was established in 1873 to meet the scientific and technical needs of the mining industry on the local goldfields. Mining, chemistry, geology, metallurgy, and art were taught. From these beginnings, tertiary education extended to other parts of central and northern Victoria. The Institute awarded its first diplomas (electrical and mechanical engineering) in 1902.

At Flora Hill, the new 85 acre site for the tertiary work of the Institute, a modern campus is under construction. This includes the Institute's first hall of residence, which provides accommodation for 75 students. The Bendigo Institute of Technology offers diploma courses in the fields of applied science, art, business studies, engineering, information processing, mathematics, and general studies.

Caulfield Institute of Technology

The Caulfield Institute of Technology, established in 1921, serves the extensive south-eastern metropolitan region of Melbourne. Its tertiary

educational activities commenced in 1944, when electrical and mechanical engineering diplomas were introduced.

A rebuilding programme at Caulfield to provide more effectively for the academic and social needs of the students is in progress. The Institute has a substantial computer installation which it is proposed to develop as the centre of an inter-college network.

Diploma courses offered by Caulfield Institute of Technology are : art and design, business studies, applied chemistry, civil engineering, electrical engineering, electronic engineering, mechanical engineering, electronic computation, and general studies.

Degree courses in applied science (electronic data processing and multi-discipline) and engineering (civil and mechanical) have recently been introduced.

Footscray Institute of Technology

The Footscray Institute of Technology, established in 1915, is the regional college for the western suburbs of Melbourne. A new five storey diploma block, part of an extensive building programme, has now been erected to house a number of diploma departments and the library and administration centre. The Institute offers students diploma courses in business studies, catering and hotel management, applied chemistry, and electrical, mechanical, civil, and electronic engineering. There is also a degree course in electrical engineering.

Gordon Institute of Technology

The Gordon Institute of Technology opened in 1887 (as the Gordon Technical College) with one general classroom and a syllabus comprising dressmaking and commercial and other vocational training. Later the curriculum was widened to include science subjects, and additional buildings, laboratories, and workshops were progressively erected to meet the demands of the growing classes. Departments were established to conduct courses in engineering, architecture, art, wool, technology, and commerce. The college was re-named the Gordon Institute of Technology in 1921.

Perhaps the most notable development in the history of the Gordon Institute was the establishment of its Textile College in 1946 in recognition of the importance of Geelong as one of the world's leading centres of textile education and research. It meets the requirements of students from overseas as well as full-time and part-time students within Australia.

In 1969, 190 acres of land were purchased at Waurin Ponds, on the south-western side of Geelong, for the re-development of the tertiary section of the Institute, and construction of buildings is now in progress.

The Institute offers diploma courses in applied chemistry, applied physics, art (fine art and graphic design), business studies, general studies (vocational writing), electronic computation (postgraduate diploma), civil, electrical, and mechanical engineering, fashion design and production, information and data processing, mathematics, nutrition and food service, science, textile chemistry, textile technology, and postgraduate work in textile studies.

Degree courses in architecture, applied science (chemistry, textile), and engineering (civil, electrical) have recently been introduced.

Prahran College of Technology

The Prahran College of Technology, established in 1915, attracts students from a wide area south-east of Melbourne. Traditionally the school has been an institute for instruction in art and the artistic trades, but in 1962 a business studies division was established to qualify students for the diploma of commerce and in 1965 a general studies division was added. The College has a modern art school which was completed in 1967 as part of a rebuilding programme. It consists of design workshops, printing workshops, photographic studios, and design and graphics studios.

The College offers courses leading to diplomas in art (fine art, photography, graphic design, industrial design), and business studies (accounting, data processing, insurance).

Preston Institute of Technology

The Preston Institute of Technology, established in 1937, is the regional centre for the provision of advanced technical education in the northern suburbs of Melbourne. To meet the predicted increase in future enrolments, due to the rapid growth of the northern metropolitan area, plans have been made to move the tertiary activities of the college to a new 100 acre site north of Melbourne. The first building on the new campus is planned for occupation in 1972.

Diploma courses at present available at the Preston Institute of Technology are: engineering (electrical, electronic, mechanical, civil), business studies (accounting, data processing), applied science (chemistry), and art (fine art, graphic design).

Royal Melbourne Institute of Technology

The Royal Melbourne Institute of Technology, established in 1887, is the largest technological teaching organisation in Australia. Its graduates provide a high proportion of Victoria's professional work force in industry and commerce. Since its inception, the Institute's enrolments have grown from 600 to 9,500 full-time and part-time students (excluding external studies students), and its accommodation has increased from eleven classrooms to 7.2 acres of studios, laboratories, workshops, and lecture rooms. The Institute is currently undergoing a major rebuilding programme on its present site to provide improved tertiary facilities, both academic and social, in an appropriate environment.

The Institute provides a wide range of associateship and fellowship diploma courses, including architecture, art and design, fine art, industrial design, graphic design, biology, building construction, business studies (accounting, data processing, local government, secretarial practice), applied chemistry, chemical process technology, commercial data processing (post-diploma), computer science, educational counselling (post-diploma), engineering (aeronautical, automotive, chemical, civil, communication, electrical, electronic, mechanical, mining, production, refrigeration), fashion design and production, food technology, geology, information and data processing, instrument technology, interior design, journalism, librarianship, mathematics, management, medical laboratory technology, metallurgy, applied physics, meteorology, personnel administration, photography, public administration, public relations, surveying, and valuations.

Degree courses in business studies (accountancy), applied science (applied biology, applied chemistry, computer science, food science and technology, mathematics, applied physics, surveying), engineering (civil, chemical, electrical, communications), and librarianship have recently been introduced.

Swinburne College of Technology

The Swinburne College of Technology, established in 1908, is the regional technical college for the eastern suburbs of Melbourne. Classes in a limited number of subjects began in 1909 with a student enrolment of eighty. The range of subjects gradually increased; in 1915 day diploma courses in engineering started and other professional courses were added as the need arose. A three storey art building, a chemistry school and central library were erected, and, in recent years, the Ethel Swinburne Centre for student amenities, the R. G. Parsons Building for applied science, and the McPherson School of Engineering were opened. Academic and student facilities at the College are being improved and expanded further as part of a development programme.

The College offers diploma courses in applied chemistry, art (advertising, television, and film), biochemistry, business studies (accountancy, administration, electronic data processing, secretarial), engineering (chemical, civil, electrical, electronic, mechanical, production, heating, ventilation and air conditioning), and general studies.

Degree courses in business studies (accountancy), applied science (applied chemistry), and engineering (civil, mechanical, production) have recently been introduced.

Warrnambool Institute of Advanced Education

From the junior technical courses which were introduced in 1922, Warrnambool has now progressed to the stage where it offers complete diploma courses in a number of disciplines, while providing the first year or two in others. Plans are presently being studied for developing the college into a regional institute to accommodate an anticipated student population of over 1,000 by 1978. These plans follow a two year investigation of the potential for such a tertiary college to service the needs of the south-western region of Victoria and take into consideration the possibility of the re-location of the present college on a new campus site.

At present, Warrnambool provides full diploma courses in electrical, civil, and mechanical engineering, applied chemistry, business studies, general studies, and art.

Gippsland Institute of Advanced Education

The Gippsland Institute of Advanced Education, established in 1928 as the Yallourn Technical College, is the major centre of tertiary education serving eastern Victoria. The college has played a significant educational role in training students for professional employment in the industrial complex of the La Trobe Valley and elsewhere. It started by teaching trade courses and part-time diploma courses, the first diplomas being awarded in applied chemistry and civil engineering. A diploma of business studies course was commenced in 1968. Because of the regional importance of

the college its tertiary section is being re-located on a new campus at Churchill, near Morwell. This provides academic facilities and courses diverse enough to cope with the requirements of an ultimate enrolment of 1,500 students. Plans for the college also envisage residential accommodation for students.

The Institute at present awards diplomas in applied chemistry, business studies (accounting), civil, electrical, and mechanical engineering, art, and general studies.

Victorian College of Pharmacy

The Victorian College of Pharmacy is owned and operated by the Pharmaceutical Society of Victoria. Since 1884 it has prepared students for examinations which are recognised by the Pharmacy Board of Victoria and which lead to registration as a pharmacist in Victoria.

In 1966 the Victorian College of Pharmacy became affiliated with the Victoria Institute of Colleges, and the first Bachelor of Pharmacy degrees were granted by the V.I.C. in June 1968. A three year full-time course of instruction is given to all students seeking registration as pharmaceutical chemists. In addition, students undertake approximately 18 months of practical training in a pharmacy or laboratory approved by the Pharmacy Board of Victoria. At least 12 months of this practical training must be served after completion of the three year academic course.

In 1970 the first stage of a new teaching block was completed to provide accommodation for the departments of physics and pharmaceutics and for the library. The second stage of this project was started in the same year.

Therapy schools

Occupational Therapy School of Victoria

This school, established in 1948, had its origins in the need for post-war rehabilitation services in Australia. After several intermediate stages of development, the school finally moved to Lincoln House in 1966. It is under the control of a Board of Management and conducts a three year full-time course leading to the Diploma of Occupational Therapy.

Physiotherapy School of Victoria

Although the first teaching in physiotherapy in Victoria commenced at the University of Melbourne and the Royal Melbourne Hospital in 1905, there was no established school until 1960, when space was made available at Fairfield Hospital. The move to Lincoln House was made in 1966. The school, which is administered by the Masseurs Registration Board, Victoria, offers a three year course leading to the Diploma of Physiotherapy.

Victorian School of Speech Science

A training centre for speech therapists was first established in Melbourne in 1945 at the Royal Children's Hospital. The centre developed through successive stages of growth until its ultimate move to Lincoln House in 1966. The school is conducted by the Victorian Council of Speech Science. The course extends over four years (full-time) and successful students are awarded the V.I.C. degree of Bachelor of Applied Science in speech science. The Australian College of Speech Therapists is the Federal examining and registering body for the profession in Australia.

Lincoln House

Lincoln House—the premises jointly occupied by the three therapy schools since 1966—is located near the University of Melbourne, the Royal Melbourne Institute of Technology, and several leading hospitals. The building has been specially re-designed and equipped as a centre of paramedical education. Although the three schools are autonomously conducted, they enjoy a close liaison and share many educational and administrative services.

College of Nursing, Australia

Established in 1950, the College of Nursing, Australia, offers full-time and part-time diploma courses to nurses who have completed their basic general nursing training.

Conducted by an autonomous council, the College has its headquarters in Melbourne and branches in Western Australia and Queensland.

The aims of the College are to cultivate and maintain the highest principles of nursing practice and ethics; to raise the status and standing of the nursing profession by making provision for trained teachers and administrators in the profession; to make adequate provision for the postgraduate training of nurses; and to bring together members of the nursing profession, both in and out of Australia, for the purpose of scientific discussion and practical demonstration of nursing subjects.

The College of Nursing, Australia, at present offers courses leading to diplomas in nursing administration, nursing education, nursing education (midwifery), hospital nursing and ward management, operating theatre nursing and management, intensive care nursing and management, public health nursing, and public health nursing (occupational health).

Further references, 1967–1971

Melbourne Kindergarten Teachers' College

The training for kindergarten teachers in Victoria was initiated by the Free Kindergarten Union of Victoria in 1916. In 1918 the Union was formally granted registration as an approved teacher training institution by the Council of Public Education which also registers kindergarten teachers in its sub-primary division. In 1922 the College was established on the present site in Kew. Three years later the two year course of training was extended to three years, thus making the College the pioneer of a three year diploma course for teachers in Australia. In 1965 the Free Kindergarten Union granted the College autonomy and it is now an independent College with an autonomous governing council.

The College receives an annual grant for recurrent expenditure from the Education Department and this is supplemented by student fees and public donations. To assist students to undertake the course a small number of bursaries is provided each year by the Department of Health, and both the diploma and post-diploma courses are approved for Commonwealth Advanced Education Scholarships.

In 1962 a rebuilding programme was commenced, and in March 1965 the first section of the new college was completed. In November

1969 the second section was opened. A capital grant from the State Government of just over \$0.5m made the erection of the new college possible and a grant of \$24,000 from the Commonwealth Government has been used to add equipment and library holdings. A further amount of \$186,000 is available from the Commonwealth Government, and when this next building, including a hall and tiered lecture theatre, is completed, accommodation for the 450 to 500 students in diploma and post-diploma courses will be more adequate.

VICTORIA—MELBOURNE KINDERGARTEN TEACHERS' COLLEGE:
SOURCES OF INCOME FOR RECURRENT EXPENDITURE
(\$)

Year	State Government grant	Student fees	Other income	Total income
1966	88,000	44,435	1,187	133,622
1967	91,500	47,867	2,104	141,471
1968	100,000	50,254	7,250	157,504
1969	112,500	78,669	4,854	196,023
1970	179,000	107,488	4,582	291,070

Courses

Three year diploma course

The course of training assumes that a teacher must be a broadly educated person able to guide young children intelligently and with sensitivity in the exploration and interpretation of the world around them. The general education courses in the curriculum are planned with this objective in view and the inclusion of elective studies in this area gives students the opportunity of concentrating during the three years of the course on a subject of particular interest. Professional education courses include the study of psychology, child development, and of the content of education for children in the age range from 3 to 8 years. Students undertake teaching practice in pre-school kindergartens and in State and registered schools with children in the same age range.

A special diploma course with regular weekly classes held over two years is also offered to enable infant and primary trained teachers currently teaching in pre-school kindergartens to gain a K.T.C. Diploma.

Post-diploma course

The College also offers a one year full-time course of advanced studies, open to experienced kindergarten teachers, leading to the Diploma of Advanced Studies in Education. Teachers from other States in Australia and from overseas have enrolled in this post-diploma course. They have subsequently taken senior teaching posts, or been appointed as kindergarten supervisors or college tutors in early childhood education.

In-service courses

The College Council has set up an In-Service Advisory Committee consisting mainly of kindergarten teachers representing most regions of Victoria. It is responsible for advising the principal on the courses teachers want to undertake; most of the courses deal with professional skills and

current trends in education and are usually of 8 to 15 weeks duration. Each year several hundred teachers enrol.

A special part-time in-service course is also offered to enable infant and primary trained teachers, currently teaching in pre-school kindergartens, to gain a K.T.C. Diploma.

**VICTORIA—MELBOURNE KINDERGARTEN
TEACHERS' COLLEGE: ENROLMENTS**

Year	Three year diploma course	Special in-service diploma course (a)	Post- diploma course	Total
1967	194	23	6	223
1968	203	38	6	247
1969	248	15	7	270
1970	315	25	(b)	340
1971	369	17	7	393

(a) A special part-time in-service course to enable primary and infant teachers teaching in a kindergarten to gain the K.T.C. Diploma.

(b) Course discontinued for one year.

Council of Adult Education

The Council of Adult Education is a statutory body charged with the broad functions of advising, reporting, planning, and administering adult education. Through the Minister of Education, the Council is responsible directly to the State Parliament, to which it reports annually.

Activities

The Council of Adult Education comprises twenty-three members, seven *ex officio* and the others appointed for three year terms by the Governor in Council. *Ex officio* representation is from the University of Melbourne, Monash University, La Trobe University, the Victoria Institute of Colleges, the Australian Broadcasting Commission, the Education Department, and the Council itself through its Director appointed by Cabinet. Eight of the appointed members are nominated by interested bodies named in the Act, and four by voluntary and other associations. Of the remaining four, two are Governor in Council nominees and two are co-opted on the recommendation of the Council.

Under the Director, four professional adult education officers, a librarian, and two executive officers, assisted by full-time clerical officers, administer different sections of the Council's work.

The following tables show details of the Council's activities :

VICTORIA—ADULT EDUCATION: LECTURE CLASSES AND ENROLMENTS

Lecture classes	1968-69		1969-70		1970-71	
	Spring term	Autumn term	Spring term	Autumn term	Spring term	Autumn term
Courses offered	142	446	147	383	155	383
Students enrolled	4,468	12,748	4,141	10,625	4,013	10,966

VICTORIA—ADULT EDUCATION : GROUP ACTIVITIES

Particulars	1967	1968	1969	1970	1971
Discussion groups—					
Number of groups	500	505	520	534	535
Students enrolled	5,511	5,611	5,763	6,053	6,097

Finance

The following table shows the income and expenditure of the Council for the years 1966–67 to 1970–71 :

VICTORIA—COUNCIL OF ADULT EDUCATION : INCOME AND EXPENDITURE
(\$'000)

Particulars	1966–67	1967–68	1968–69	1969–70	1970–71
INCOME					
Government grant	166	176	188	199	222
Lecture fees, etc.	122	154	164	198	207
Conferences	33	34	34	24	22
Miscellaneous	5	4	6	5	3
Total income	326	369	393	427	457
EXPENDITURE					
Salaries	107	116	119	135	158
Classes, library, and discussion groups	111	139	156	166	152
Administration	66	71	63	74	72
Miscellaneous	43	42	54	53	74
Total expenditure	326	369	393	427	457

Further references, 1963–1971 ; State Film Centre, 1964, 1969 ; Education for management, 1970

HEALTH AND MEDICAL RESEARCH

Environment protection

In December 1970 the Government enacted the *Environment Protection Act* 1970. This Act represents a change in the method of approach to the discharge of wastes into the environment of Victoria and the definition of the word "pollution" contained in the Act is :

"Pollution" means any direct or indirect alteration of the physical, thermal, chemical, biological, or radio-active properties of any part of the environment by discharging, emitting, or depositing wastes so as to affect any beneficial use adversely, to cause a condition which is hazardous or potentially hazardous to public health, safety, or welfare, or to animals, birds, wildlife, fish or aquatic life, or to plants or to cause a contravention of any condition, limitation, or restriction to which a licence under this Act is subject.

The responsibility for pollution control has been shared over the years by various agencies, many with statutory responsibilities for the protection of public health, fish and wildlife, and other fields. Each agency has built up considerable experience and technical support in its particular area of responsibility.

One of the major aims of the environment protection legislation has been to place the full responsibility for the protection of the environment

on the Environment Protection Authority constituted under the Act, and yet continue to allow the facilities and technical support which have been built up over many years in the various protection agencies to be fully utilised. The Act has achieved this aim by permitting the delegation to the agencies of any of the functions of the Environment Protection Authority, although the ultimate responsibility for the protection of the environment remains with the Authority. Pollution will be controlled by the management of wastes.

Special emphasis will continue to be placed on the protection of the community's health from the effects of pollution both insidious and otherwise. A licence to discharge wastes will not be issued if the Commission of Public Health considers that the public health is likely to be threatened.

Some of the principal features of the Environment Protection Act are as follows. First, the Act provides for the establishment of State environment protection policy respecting conditions to be maintained in the various segments or areas of Victoria's environment. The adopted policies will form the guidelines for action by all agencies in the prevention of pollution. Second, a system of licensing will prevent pollution and enable the State to know the extent of wastes being discharged into the environment. Third, the Act supplies firm controls on pollution if it should occur despite the strong prevention programme. The fourth feature is the establishment of an authority to assume the overall responsibility for environment protection.

The Environment Protection Authority was established on 1 July 1971 together with the Environment Protection Council, which was formed to advise the Authority.

Health Department

Under the *Health Act* 1958, responsibility for the health of the community is vested in the Minister of Health and in exercising control of various aspects of health work he is supported by such bodies as the Commission of Public Health, the Mental Health Authority, the Hospitals and Charities Commission, and various bodies exercising oversight of special services and of groups of persons engaged in particular professions or industries.

The principal advisers of the Minister on matters which come within their respective fields of responsibility are the Permanent Head of the Department, the Chief Health Officer, the Chairman of the Mental Health Authority, and the Chairman of the Hospitals and Charities Commission. Under the Health Act the Minister may also appoint, from time to time, consultative councils of experts to advise him on special problems concerned with public health. This has been done in matters relating to poliomyelitis and maternal and infant mortality. The Minister is assisted by a central administrative branch containing a secretariat with its various service sections. The Department is divided into the General Health, Mental Hygiene, Maternal and Child Welfare, Tuberculosis, and Alcoholic and Drug-dependent Persons Services Branches. The Mental Health Authority is responsible for the Mental Hygiene and the Alcoholic and Drug-dependent Persons Services Branches while the remaining three branches are each under the control of a medical specialist and an administrator, all of whom are responsible to the Chief Health Officer.

The *Alcoholic and Drug-dependent Persons Act* 1968 brings up to date previous legislation on the subject and allows the development of suitable institutions for the diagnosis, treatment, and rehabilitation of persons suffering from alcoholism or drug addiction. In the development of this service emphasis is placed on early diagnosis and voluntary treatment of patients.

The Commission of Public Health, with the Chief Health Officer as its chairman and six other members as constituted under the *Health Act* 1958, is responsible for all aspects of environmental health including such matters as the prevention of pollution of the air and of sources of water supply and regulation of the use and transport of radioactive substances. The policies of the Commission are carried out either by officers of the General Health Branch acting under the day-to-day direction of the Chief Health Officer or by the exercise of oversight by the General Health Branch over the work of municipal councils. The General Health Branch supervises community services which help to care for older persons in their own homes, thereby considerably reducing the demands upon hospitals for the aged. A body known as the Foods Standards Committee recommends regulations for the control of standards to ensure the purity of food, these regulations being administered primarily by municipal councils.

Under the direction of the Mental Health Authority a comprehensive service for the mentally ill has been developed in recent years, emphasis being given to outpatient services throughout the State. Intensive treatment for early cases requiring hospital treatment is provided in special psychiatric hospitals, while mental hospitals provide care, treatment, and rehabilitation for patients requiring long term care. Residential special schools for intellectually handicapped children are operated by the Authority which also subsidises the operation of large numbers of day training centres throughout the State. Research into the causes of mental and emotional illness and investigations of new and improved methods of treatment are being carried out, while community education programmes increase the understanding of the problems of mental ill-health. A personal emergency service provides a continuous service for persons with urgent emotional problems.

The Hospitals and Charities Commission, operating under the Hospitals and Charities Act, exercises general supervision over all public institutions subsidised by the Government and thereby contributes to the maintenance of a high standard of hospital service. The Commission recommends allocations of money from the Hospitals and Charities Fund to these bodies, and registers and supervises the operation of private hospitals, ambulance services, and other bodies established for charitable purposes. In a community in which the proportion of older persons is increasing, the Commission helps to deal with a problem which faces health administrators by conducting a placement service in private hospitals for older persons awaiting admission to hospitals for the aged.

The Minister of Health is responsible to Parliament for the activities of a number of other important bodies such as the Anti-Cancer Council, the Cancer Institute Board, the National Fitness Council, and the Fairfield Hospital Board, together with a number of registering authorities associated with practice by doctors, dentists,

pharmaceutical chemists, dietitians, opticians, nurses, masseurs, psychologists, chiropodists, etc.

Further references, 1964-1971; Industrial hygiene, 1964; Poliomyelitis and allied diseases, 1964; Food standards and pure food control, 1964; Communicable diseases, 1964; Control of poisons and deleterious substances, 1965; Inter-departmental Committee on Pesticides, 1965; School Dental Service, 1966; Epidemics, 1967; School Medical Service, 1968; Poisons Information Centre, 1969; Public health engineering, 1969; Drug and poison control, 1970

Maternal, infant, and pre-school services

The Maternal, Infant, and Pre-School Welfare Division of the Maternal and Child Welfare Branch of the Department of Health is responsible for administering the pre-natal, infant welfare, and pre-school services in Victoria.

Infant welfare services

Development has been on a decentralised pattern with infant welfare centres being established in municipalities throughout Victoria as a responsibility of the local authorities. The buildings are the property of municipal councils, although the State Government pays capital grants, up to a maximum of \$6,000, towards their erection. The councils employ the infant welfare sisters, but the State Government pays a maintenance grant of \$1,900 per annum for each sister employed.

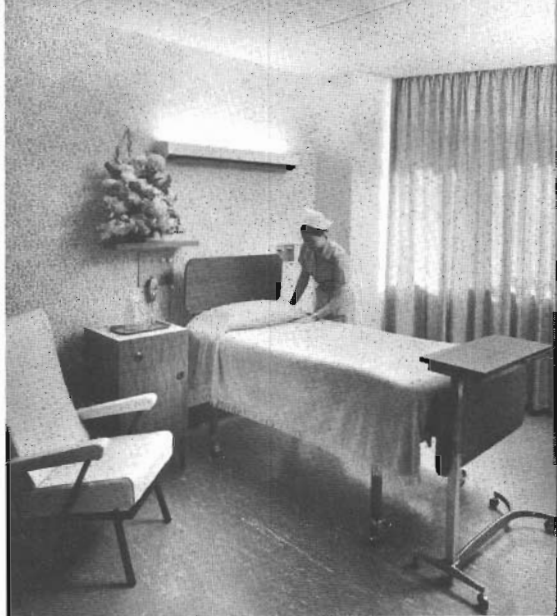
The infant welfare services provided for a community depend upon its population, composition, and density, and more specifically its number of births per year. A town with a population of 8,000, with approximately 200 birth notifications per year, needs a full-time infant welfare sister and requires at least one infant welfare centre building. Smaller towns may not require a full-time sister and a municipality may employ one sister to provide infant welfare services to four or five townships. In this case the sister requires a car and the State Government pays a subsidy of \$1,400 to the Council towards the cost of purchasing the car, and also a transport subsidy based on the mileage travelled.

As well as supervising the health of the children under five years of age and advising mothers, the sister may take part in immunising the children, and may give mothercraft demonstrations and arrange other health education activities for the parents, such as discussion groups, film nights, and talks from visiting specialists on health, education, and welfare.

Every municipality in the State shares in the infant welfare service, although one municipality relies on the service of an infant welfare sister employed by a hospital and does not contribute towards its cost.

The Department of Health provides the infant welfare sisters for the service in the migrant hostels and the Commonwealth defence stations in Victoria, since these cannot be considered the responsibility of municipal councils.

The Department of Health also provides mobile infant welfare services for some of the sparsely populated country areas where most mothers would have to travel long distances to reach a centrally placed service. The Department provides the infant welfare sisters for this service and supplies each with a station wagon fitted with the equipment needed for her work. Several municipalities may be served on one circuit by such a service and each contributes towards the cost in proportion to the amount of time spent in its area.



A ward and private room in the new Mercy Maternity Hospital showing the public corridor along the outer perimeter of the building. All nursing facilities are located in the centre of each floor.

Val Foreman

Surgeons working at St Vincent's Hospital are using sophisticated micro-surgical techniques and equipment. The equipment which has been specially made or modified in Melbourne for micro-surgery includes a foot operated microscope for use simultaneously by three surgeons and specially designed forceps, needle holders, sutures, scissors, nerve cutters, and micro vascular clamps.

The Age



The city square in February 1972,
looking towards the Melbourne Town
Hall.

Commonwealth Bureau of Census and Statistics



The interior of the Regent Theatre, Melbourne's largest cinema,
soon to be demolished for the city square development.

Hoyts Theatres Ltd



Some mothers in the remote parts of the State cannot be reached by the mobile service and for them the Department of Health provides the Infant Welfare Correspondence Service. This is conducted by a sister in the Department who corresponds regularly with the mothers and sends progress letters throughout the early years of the child's life.

Health education is an important part of the Maternal and Child Welfare Service. In addition to the teaching given to mothers in infant welfare centres, mothercraft teaching is given to girls in secondary schools by infant welfare sisters. The aim is to reach all girls at some stage before they leave school.

Particulars of infant welfare services in Victoria for the years 1967 to 1970 are listed below :

VICTORIA—INFANT WELFARE SERVICES

Particulars	1967	1968	1969	1970
Municipal centres	676	689	695	707
Centres on mobile circuits	17	11	11	11
Centres in non-ratepaying areas—				
Migrant hostels	9	8	8	8
Commonwealth defence stations	1	1	1	1
Total all types	703	709	715	727
Number of infant welfare sisters in centres	360	371	387	395
Number of birth notifications received	65,387	69,903	71,090	73,422
Number of children attending centres	186,395	251,039	307,575	331,555
Number of attendances of children at centres	1,432,815	1,452,457	1,537,963	1,560,085
Number of expectant mothers attending centres	9,375	9,335	9,874	9,296
Number of attendances of expectant mothers	17,453	18,931	19,426	21,572
Number of post-natal visits to mothers in hospital	25,929	27,049	26,335	26,482
Number of home visits after birth of baby	159,468	151,139	157,753	157,560
Infant Welfare Correspondence Scheme—				
Number of children enrolled	68	74	79	66
Expectant mothers enrolled	8	6	6	1
Mothercraft teaching in schools—				
Number of schools	166	152	153	137
Number of special groups	8	5	7	5
Total schools and groups	174	157	160	142
Number of courses	386	358	355	318
Number of lectures	4,060	3,708	3,399	3,121
Number of students	10,848	9,660	9,252	9,062
Certificates issued	9,637	8,293	8,190	7,111

Pre-natal service

In all infant welfare centres advice is given by the infant welfare sister on health education, pre-natal care, and mothercraft. At twenty-eight selected infant welfare centres, a pre-natal clinic is conducted by a medical officer employed by the Maternal and Child Welfare Branch, Department of Health. These clinics are run in conjunction with public maternity hospitals serving these areas. The extent of the service rendered is outlined in the following table:

VICTORIA—PRE-NATAL CLINICS AND ATTENDANCES

Particulars	1967	1968	1969	1970
Total number	30	28	28	29
Patients attending	6,718	8,350	7,183	7,030
Number of attendances at clinics	29,940	32,763	30,396	30,267

Pre-school services

The building of pre-school centres has been aided in Victoria in a similar way to that of infant welfare centres. In this case, however, the building may be owned by the municipal council, a church body, or a voluntary kindergarten organisation. If the building is owned by an independent committee, the municipal council must be willing to sponsor the project and receive the subsidy.

A building grant on a two-to-one basis up to a maximum of \$6,000 for a single unit centre, or \$10,000 for a double unit, is paid towards the erection of a pre-school centre, which, like the infant welfare centre, has to be approved in the planning stage. These buildings vary in size and complexity according to the needs of the municipality. In general, the unit is a single one providing for twenty-five to thirty children; but in bigger areas a double unit accommodating up to fifty to sixty children at one time may be provided. To give as many children as possible the benefit of attending these centres different groups may be taken in the morning and afternoon.

Even though the pre-school centre may not adjoin the infant welfare centre, the functions of these two centres are closely linked and give continuity in the health supervision of the child in the first five years of life.

The most general type of pre-school centre required by a community is the kindergarten, but in some areas a pre-school play centre may be all that can be established at first. This type of pre-school centre may be conducted by a pre-school play leader, who has less training than a kindergarten teacher. Only fifteen children may be cared for by a pre-school play leader and she is not qualified for parent education work, which is an important part of the pre-school kindergarten programme.

In urban areas a third type of pre-school centre is required for the all-day care of children whose mothers go to work. There are fifteen day nurseries and one crèche, which provides occasional care, subsidised by the Government of Victoria. They may take children from infancy to five years of age and then the person in charge must be a State registered nurse with experience in the care of infants and young children. She has mothercraft nurses on her staff. In addition to the subsidised day nurseries, the Department of Health supervises private child minding centres to ensure that the minimum standard of service required for registration is being maintained.

Children attending pre-school centres may have a free medical examination conducted by a medical officer of the Department of Health or the municipal council or, in a few cases, by a private doctor. Of the 829 subsidised pre-school centres existing in 1970, 617 were visited by

Department of Health medical officers, 37 by municipal maternal and child welfare medical officers, and 23 by private doctors.

Pre-school maintenance subsidy

The subsidy paid to a pre-school kindergarten is equal to the salary entitlement of the kindergarten teacher and at December 1970 ranged from \$3,029 to \$4,501 a year. In the case of a pre-school play centre the subsidy is \$1,500 for a full-time centre. The subsidy paid to a day nursery is \$250 per child per year.

The number of subsidised pre-school centres during the years 1968 to 1970 and their particulars are as follows :

VICTORIA—SUBSIDISED PRE-SCHOOL CENTRES : TYPE AND ENROLMENTS

Pre-school centres	1968		1969		1970	
	Number	Enrolment	Number	Enrolment	Number	Enrolment
Kindergartens	641	32,393	665	33,638	701	35,324
Play centres	110	3,264	114	3,508	113	3,344
Day nurseries	14	716	15	741	15	759
Crèche (occasional care)	1	100	1	100	1	100
Total	766	36,473	795	37,987	830	39,527

NOTE. Enrolment figures for day nurseries and the crèche show capacity only.

Training programmes

Infant welfare sisters. Approximately seventy infant welfare sisters are trained each year. Three training schools, subsidised by the Department of Health, conduct the four month infant welfare training course which can only be taken by double-certificated nurses. Twelve bursaries are awarded by the Department of Health for this training each year.

Mothercraft nurses. Nine Mothercraft Training Schools, subsidised by the Department of Health, conduct fifteen month courses for girls training to become mothercraft nurses. Each year about 150 mothercraft nurses are trained.

Pre-school mothercraft nurses. The six month training course for registered mothercraft nurses is conducted by the Maternal and Child Welfare Branch of the Department of Health. Ten bursaries were awarded by the Department for this training during 1970.

Pre-school kindergarten teachers. The Melbourne Kindergarten Teachers' College at Kew conducts a three year diploma course for girls training to become kindergarten teachers. The Department of Health awarded thirty bursaries to students commencing this training during 1970—fifteen to metropolitan students and fifteen to country students.

Pre-school play leaders. The Maternal, Infant, and Pre-school Division of the Department of Health conducts a one year course for students training to become pre-school play leaders. Eight bursaries were awarded in 1970.

Building grants

The following tables show the number and amounts of capital grants

approved for building infant welfare centres, pre-school centres, and day nurseries :

VICTORIA—INFANT WELFARE CENTRES, PRE-SCHOOL CENTRES, AND DAY NURSERIES
(number)

Buildings subsidised	1968	1969	1970
Infant welfare centres	26	30	32
Pre-school centres	70	62	54
Day nurseries	1	2	6
Total	97	94	92

(\$'000)

Building subsidies	1967-68	1968-69	1969-70
Infant welfare centres	119	134	125
Pre-school centres	245	264	256
Day nurseries	36	2	16
Total	400	400	397

NOTE. Above tables are not available on the same yearly basis.

Expenditure

Expenditure of the Maternal and Child Welfare Branch in the years 1966-67 to 1969-70 is shown in the following table :

VICTORIA—EXPENDITURE ON MATERNAL, INFANT, AND PRE-SCHOOL WELFARE
((\$'000))

Particulars	1966-67	1967-68	1968-69	1969-70
Pre-school education				
Subsidies to organisations towards cost of maintaining pre-school centres	1,588	1,847	2,255	2,615
Scholarships for training pre-school teachers and play-leaders	73	89	91	95
Maternal and child health—				
Salaries	311	317	323	359
Subsidies to municipalities, etc., towards cost of maintaining infant welfare centres	544	670	702	719
Subsidies to infant welfare and mothercraft training schools	34	60	72	73
Scholarships for training infant welfare sisters	1	3	2	3
Other expenditure	73	74	86	86
Child welfare—				
Subsidies to organisations towards cost of maintaining day nurseries and crèches	164	182	192	199
Scholarships for training pre-school mothercraft nurses	2	2	3	3
Total	2,792	3,244	3,727	4,152

School Medical Service

The School Medical Service was founded in 1909 as a branch of the Victorian Education Department and was incorporated in the Department of Health in 1944. Before 1967 the service examined school children three times during their schooling—in Grades 2 and 5 and in Form 3. Teachers also referred for examination any children they suspected were in ill health or were medically handicapped ; those who had previously shown signs of illness were reviewed at a later date.

In 1967 the plan was changed to the routine examination of most children in Grade 1, with follow-up examinations and examinations as the result of teacher referrals in higher grades. Screening procedures to check vision and hearing were instituted in later grades. When any illness is discovered the child is referred to the source of medical care the parents nominate—usually the family doctor.

The assessment of children who are unable to cope at school takes most of the school doctor's time. Mentally defective children become the specific responsibility of the Mental Hygiene Branch of the Department of Health, which maintains institutions and day centres where social and handicraft skills are taught. Emotionally disturbed children may be referred to a consultant psychiatrist. Children with impaired hearing or defects of speech, the blind and partially sighted, and children who are physically handicapped, are helped to receive the necessary medical treatment and any special educational help needed. In addition to this work, the medical officers and nursing sisters work in liaison with private medical practitioners, parents, and teachers.

Familiarity with welfare services and community facilities greatly helps in the management of children and families in need of aid. The school medical officer and the sister who works with him have special skills and knowledge gained from their experience in the school situation. Though they play no part in conventional treatment they can contribute to the better management at school of the child whose health is impaired. This is particularly so in cases of chronic or recurrent illness or where the child is handicapped by disease. Teachers are often the first to notice illness in a child because of its effect on general behaviour and classroom performance.

Close liaison is maintained with the Mental Health Authority and the Psychology Branch of the Education Department, and survey work is carried out to help in assessment of health standards and problems in school children. This work is done in co-operation with the Commonwealth Bureau of Census and Statistics.

During 1970 there were 238,446 examinations in schools ; 2,963 special examinations, including referrals to specialists ; 9,092 medical examinations of teachers and applicants for teaching studentships, and approximately 16,000 assessments of health statements and medical records of applicants for studentships and temporary employment.

School Dental Service

In co-operation with the Education Department, the School Dental Service began in 1921 with the opening of a dental clinic at South Melbourne. State school children visited the clinic for treatment and returned each year for a dental check-up. As children in country districts also needed dental care the service was extended to country areas, using portable equipment carried in dental vans. At this time there was a staff of only nine dentists. The dental service was limited to schools in the inner industrial suburbs of Melbourne, orphanages, and certain country districts. Emphasis was placed on the treatment of children aged up to twelve years ; this covers the period when first teeth are replaced by the permanent teeth. In 1944 the dental service was transferred to the

Health Department. The Department bought new vans and twin semi-trailer units in 1951 and the service extended into more country areas. The clinic at South Melbourne had moved to larger premises by 1951, and centres were opened at North Fitzroy in 1953 and Footscray in 1959. These small inner suburban centres serve only schools in their own locality. In country districts the emphasis is on the provision of dental treatment in the more remote areas.

The rapid increase in the number of school children, the inclusion of Catholic schools, and the acute shortage of dentists are factors that limit the extension of the service to additional schools. Treatment is currently available to 60,000 children, including those attending primary school, and children at various institutions in metropolitan and country areas.

Health promotion

In Victoria, health education of children is mainly carried out by parents and teachers. The School Medical Service seeks to promote child health through school teachers because of their special relationship with children.

The Service advises the Education Department on the health standards of schools and school teachers, and the medical suitability of all applicants for teaching service is assessed.

Some school medical officers work in the teachers colleges to promote the health of school children through the teachers of the future. This is done by individual and group health education and counselling of students. Also, the doctors help prepare future teachers to present health as a curriculum subject in the schools.

Tuberculosis Branch

There has been no change to the broad policy of tuberculosis control over the past years. Mortality rates in Victoria have been so low for many years that they do not give any accurate gauge of progress; the last official figure available was 1.37 per 100,000 in 1970. The result of tuberculin testing amongst children probably reflects the current amount of spread of infection in the community, but variables can interfere to make comparison from year to year unreliable. In 1970 the percentage of natural positive reactors to tuberculin amongst school children aged 14 years was 2.1.

Morbidity figures are probably the most reliable indicator at present. The following table provides a comparison of figures for new active cases, reactivation of previously reported cases, and those suffering from chronic active disease for the years 1966 to 1970:

VICTORIA—ACTIVE TUBERCULOSIS CASES

Year	New cases	Reactivated cases	Chronic cases	Total cases
1966	649	78	59	786
1967	599	80	49	728
1968	535	57	38	630
1969	497	44	38	579
1970	421	61	33	515

Good social and economic conditions have contributed towards the improved situation. However, major credit must be given to current methods of case finding, medical supervision, and the availability of more effective chemotherapy. The use of appropriate chemotherapy guided by bacteriological control and sensitivity testing results in almost 100 per cent bacteriological "conversion" of cases of pulmonary tuberculosis presenting for initial treatment.

The reactivated cases present more problems but with the latest drugs there are very few who fail to respond and reach a negative bacteriological state. The major problem in drug therapy remains in persuading patients to accept the long term administration of these drugs. Fully supervised intermittent treatment is now gaining a place for some of these patients.

Since 1964 there has been a decrease each year in the rate of active tuberculosis cases discovered by mass X-ray surveys—from 0.66 per 1,000 in 1964 to 0.18 per 1,000 in 1970. The second compulsory chest X-ray survey commenced in Victoria in October 1967 and was completed by August 1970. During this survey 2,032,692 persons were examined yielding 504 active cases of tuberculosis—a rate of 0.25 per 1,000, compared with the first survey in 1963–1967 which yielded 987 cases, a rate of 0.47 per 1,000. Almost half of the persons detected in the second survey were in the early stages of the disease.

The third compulsory survey is now proceeding and at the end of this survey the future role of mass X-ray surveys will be reviewed.

The following tables show particulars of the operation of the Tuberculosis Service :

**VICTORIA—TUBERCULOSIS SANATORIA :
ACCOMMODATION, ETC.**

Sanatoria	1966	1967	1968	1969	1970
ACCOMMODATION					
Metropolitan Country	518 187	518 187	499 187	499 173	(a) 353 143
Total	705	705	686	672	496
ADMISSIONS					
Metropolitan Country	1,032 178	1,039 224	831 212	781 157	786 138
Total	1,210	1,263	1,043	938	924
DISCHARGES					
Metropolitan Country	919 170	1,031 195	815 180	780 145	769 127
Total	1,089	1,226	995	925	896
DEATHS					
Metropolitan Country	88 29	71 12	67 15	51 13	30 13
Total	117	83	82	64	43

(a) Gresswell Sanatorium closed in May 1970.

VICTORIA—TUBERCULOSIS BUREAUX ACTIVITIES

Particulars	1966	1967	1968	1969	1970
New cases referred for investigation	11,944	13,483	13,690	12,622	11,555
Re-attendances (old cases and new)	57,149	53,007	54,700	56,519	55,586
Visits to patients' homes by nurses	22,271	24,870	23,808	22,803	23,810
X-ray examination—Films (a)—					
Large	39,555	41,122	37,484	35,462	30,163
Micro	15,673	13,732	17,847	21,378	26,690
Tuberculin tests	11,756	10,884	12,626	11,406	10,293
B.C.G. vaccinations	4,829	4,326	4,550	3,128	3,031
X-rays taken—Chest X-ray surveys	662,576	641,974	663,707	672,925	671,914
School tuberculin surveys—Mantoux tests	90,643	72,636	90,116	89,541	81,405

(a) Excludes mass X-ray surveys with mobile units.

Compulsory chest X-rays, 1965 ; Tuberculosis and mass X-ray surveys, 1967 ; Drug and poison control, 1970

Mental Health Authority

The functions of the Mental Health Authority, defined in the *Mental Health Act* 1959, are to formulate, control, and direct general policy and administration in regard to the treatment and prevention of mental illness and intellectual defectiveness.

In the planning of mental health services in Victoria, six country regions were selected (with about equal populations in each). The Authority aims to provide a community mental health service in each region with early treatment centres, residential hospitals, day hospitals, outpatient clinics, and residential hostels. Early treatment units are now established at Ballarat, Dandenong, Larundel, Malvern, Novar, Parkville, Royal Park, Shepparton, Traralgon, and Travancore.

Training centres for intellectually defective patients are functioning at Ararat, Beechworth, Janefield, Kew, St Nicholas Hospital Carlton, Sandhurst, Stawell, Sunbury, and Warrnambool.

A State-wide service of outpatient clinics has now been established. These centres are subsidised by the Authority for their maintenance. They provide a service for the prevention and treatment of mental illness and assistance for discharged hospital patients.

Alexandra Parade Clinic, Melbourne, provides a personal emergency service and deals with alcoholism as well as the problems of forensic psychiatry. Some clinics serve many purposes, being concerned with sheltered workshops, children and family problems, counselling services, therapeutic social clubs, services for discharged patients, and hostel supervision.

For intellectually handicapped persons there are thirty-six day training centres functioning throughout the metropolitan and country areas. These centres are subsidised by the Authority for their maintenance and capital costs, while their management is under private committees supervised by the Authority's officers.

A specific function of the Authority is research and investigation into the causation and treatment of mental illness. For this purpose a statistical and research unit, which is now recognised as a training centre within the framework of the Department of Psychiatry, University of Melbourne, has been established at Royal Park.

VICTORIA—MENTAL HEALTH : PERSONS UNDER CARE OF THE MENTAL HEALTH AUTHORITY

Particulars	At 31 December—				
	1966	1967	1968 (a)	1969 (a)	1970 (b)
RESIDENT PATIENTS—					
Recommended patients—					
In State mental hospitals	3,682	3,529	3,316	3,050	2,874
In Repatriation Mental Hospital	299	291	277	245	231
In psychiatric hospitals	153	160	177	167	200
Approved patients—					
In intellectual deficiency training centres	1,047	999	942	850	888
Voluntary patients—					
In State mental hospitals	1,937	1,910	1,828	1,767	1,912
In Repatriation Mental Hospital	7	14	20	34	37
In psychiatric hospitals	374	374	355	277	286
In intellectual deficiency training centres	925	1,009	1,638	2,047	2,175
Informal patients—					
In informal hospitals	112	115	105	133	283
In training schools	521	557	184	..	..
In training centres	170	177	245	254	241
Total resident patients	9,227	9,135	9,087	8,824	9,127
NON-RESIDENT PATIENTS—					
On trial leave, boarded out, etc.	1,537	1,362	1,239	1,534	1,247
Total under care	10,764	10,497	10,326	10,358	10,374

(a) In 1968 various areas previously designated as mental hospitals and training schools were gazetted as training centres and in 1969 the remaining training schools were gazetted as training centres and informal hospitals.

(b) At 30 November 1970.

The following table gives details of the numbers of patients under care of the Mental Health Authority during 1970 :

VICTORIA—MENTAL HEALTH : PERSONS UNDER THE CARE OF THE MENTAL HEALTH AUTHORITY, 1970

Institution		Under care at 1 January			Admitted, transferred in, etc.	Discharged, transferred out, etc.	Died	Under care at 30 November		
Type	No.	Resident	Non-resident (a)	Total				Resident	Non-resident (a)	Total
State mental hospitals	9	4,817	916	5,733	3,277	2,655	708	4,786	861	5,647
Repatriation Mental Hospital	1	279	93	372	188	170	28	268	94	362
Psychiatric hospitals	3	444	328	772	6,503	6,469	51	486	269	755
Informal hospitals	8	133	..	133	2,040	1,889	1	283	..	283
Intellectual deficiency training centres	9	3,151	197	3,348	741	687	75	3,304	23	3,327
Total	30	8,824	1,534	10,358	12,749	11,870	863	9,127	1,247	10,374

(a) Non-resident patients are those on trial leave, boarded out, etc.

Mental Health Research Institute

The Mental Health Research Institute of Victoria was established in 1955. It has developed in a unique way as, besides carrying out its own researches, it has acted as the catalyst for research developments within the Department

as a whole. It has carried out a mental health education programme as part of its functioning and its buildings are intimately linked with the large departmental mental health library as well as a mental health museum. The Parkville Psychiatric Unit, a combined departmental and University of Melbourne facility for undergraduate and postgraduate teaching, lies within the complex of buildings, which was named the Institute of Research and Postgraduate Training in 1969. The Research Institute is linked with the University of Melbourne Department of Psychiatry and supervises students for postgraduate degrees—M.D., Ph.D., and M.A. There are close links with other University departments for individual research projects, which are also carried out in association with such organisations as the Victorian Marriage Guidance Council and the Family Council of Victoria. Staff and funds for research are provided mainly through departmental finances, though outside bodies are approached from time to time.

The Research Institute has been concerned mainly with compiling data relative to psychiatric morbidity in Victoria and has been running a departmental cumulative case register since the Census of 1961, one of the longest periods, if not the longest, in the world. Data on admissions, discharges, and deaths are analysed regularly and special bulletins are published annually on the incidence and prevalence of specific psychiatric disorders in terms of sex, age, and socio-cultural variables, as well as determining the results of treatment through analysis of length of stay and re-admission rates.

Among major areas of research have been studies of the occurrence of mongolism (Down's syndrome) and other congenital anomalies of the central nervous system. The occurrence of mongolism has been linked to the epidemiology of infectious hepatitis and this has been confirmed overseas. The hypothesis of virus-chromosome interaction as a cause of congenital anomalies has been formulated and immunological studies are being developed in support of this theory.

Altogether, some 400 research projects were processed and 750 papers published prior to 1970. Two total health and social surveys (one in a rural town and the other in a Melbourne metropolitan area) have been carried out in association with the three Victorian universities and have provided information about the prevalence of specific mental and physical disorders in the community and their relation to social and familial factors. Other studies have thrown light on such variable topics as mental ill-health of immigrants, alcoholism, Aboriginal adolescents, deserted mothers, and other mentally vulnerable groups. Suicide and attempted suicides have been the subject of a number of studies, as have the social causes and consequences of schizophrenia in Victoria, prevalence patterns of mental retardation, community attitudes to mental illness, and many others. The Institute has attempted to act as a bridge between biological, behavioural, and social sciences.

Besides the potential of the mongolism studies, departmental members have originated two new methods of treatment in psychiatry—the lithium treatment of mania and the treatment of enuresis with imipramine.

Further references, 1961, 1966, and 1969; Mental Hygiene Authority, 1963; Mental Health Authority, 1971

Hospitals and Charities Commission

The *Hospitals and Charities Act* 1948 set up a Hospitals and Charities Commission, consisting of three full-time commissioners, a secretary, and administrative staff. It is directly responsible to the Minister of Health.

Functions

The Commission is the authority under the Minister for the payment of maintenance and capital subsidies to registered hospitals and institutions. It exercises a close scrutiny over hospital budgets and expenditure for capital and maintenance purposes.

One of its most important functions is to co-ordinate hospital activities. It is the authority responsible for determining the site and extent of new hospital construction, and for co-ordinating hospital and institutional activities after these are established. As part of its general administrative responsibility, the Commission may inquire into the administration of institutions and societies. The Commission determines, in consultation with the Victorian Nursing Council, those hospitals which should be used for nurse training, and the standards required of nurses in hospitals. It conducts a continuous recruiting campaign for nurses, provides bursaries to encourage girls to enter the nursing profession, and generally assists hospitals in nursing matters.

The Commission promotes collective buying of standard equipment, furnishings, and supplies. The Victorian Hospitals' Association, which acts as a central purchasing organisation for Victorian hospitals, is a non-profit company of which the hospitals themselves are the shareholders. By way of encouragement to purchase, the Commission originally offered an inducement of a 33 per cent subsidy upon collective purchases made by hospitals from the Association; the amount of this subsidy has now been decreased to 15 per cent, and the Association operates as an active purchasing organisation handling all types of equipment, drugs, and commodities generally used by hospitals. Total sales by the Victorian Hospitals' Association in the year 1969-70 amounted to \$6.4m.

In the year 1969-70 the Commission distributed a gross amount of \$14.8m from loan funds for new buildings, additions or remodelling projects, and for furnishings and equipment for hospitals, institutions, and ambulance services. It distributed \$59.5m for maintenance purposes.

The Commission exercises control over State funds :

1. For capital works. Commission approval is required at all stages of the building project from the original narrative through the preliminary sketches to documentation, tendering, and supervision of the project.
2. For maintenance purposes. Each institution is required to submit for Commission approval a budget covering the succeeding year's operation.

At 30 June 1970 the Commission had on its register 1,769 institutions and societies, which, besides public and private hospitals, included benevolent homes and hostels, organisations for the welfare of boys and girls, crèches, relief organisations, and other institutions or societies.

Public hospitals

Since their inception in 1846 Victorian public hospitals have maintained a distinctive pattern. First, they are managed by autonomous

committees elected by contributors, following closely the practice applying in Britain before the introduction of the National Health Service. Second, they have received financial assistance by way of government subsidies. With rising costs, this has steadily increased in amount and proportion. At present hospitals in Victoria derive some 67 per cent of their income from government sources. Third, medical staffing has followed the former traditional British pattern of honorary service. In recent years this has been necessarily supplemented by salaried doctors employed either in university teaching departments or in diagnostic and technical therapeutic fields.

Patients are broadly separated into two groups, according to an income test. Those earning below a determined level of income are eligible for public hospital care at a fee of approximately half the actual cost; medical care is free through the honorary system. Those patients whose incomes are above the level prescribed are required to pay intermediate or private hospital accommodation charges at higher rates, but only rarely does the charge cover cost; they must, in addition, meet medical fees, against which they may insure.

For a moderate premium a public patient can cover himself and his family against the public hospital accommodation charges of \$15 a day. The insurance benefit includes an amount of \$2 a day derived from Commonwealth hospital benefits. Private and intermediate patients may insure against their higher hospital charges and may, in addition, take a medical benefits cover to help meet the doctor's bill.

Improved medical methods and more effective drugs have shortened the average patient stay in hospital, with an important effect upon the community need for acute hospital beds. In Victoria the present acute hospital bed need is assessed at fewer than 4 beds per 1,000 of population as compared with 7.5 beds in 1948. The fall is significant, not only in its effect on hospital building costs to provide for an expanding population, but in terms of cost to the patient.

Improved medical and hospital care have shortened bed stay, but they have also increased the length of life expectancy, with a corresponding increase in the number of older people in the community, and State instrumentalities, in collaboration with the hospitals and religious and charitable organisations, are endeavouring to meet the changing needs.

Private hospitals

The Hospitals and Charities Commission registers and controls the standards of private (or non-public) hospitals through regular inspections.

Bush nursing hospitals are registered with the Commission as private hospitals. (See pages 500-2.)

In recent years total bed capacity has increased with the registration of more private hospitals and additional wards in existing private hospitals. Private hospitals therefore constitute an important aspect of the hospital facilities available in Victoria. At 30 June 1970 there were, in the metropolitan area, 217 registered private hospitals with 5,957 beds, whilst in country areas there were 91 registered private hospitals with a total of 1,790 beds.

Regional planning

The Regional Hospital Service was instituted in 1954, when eleven regions were formed, each centred on a base hospital. Regional councils were appointed and these meet regularly to co-ordinate activities. Medical, administrative, nursing, engineering, and catering advisory committees also meet at regular intervals to discuss problems and make recommendations to the regional councils.

Services which are being set up in each region as personnel become available will include pathology, radiology, blood banks, physiotherapy, speech therapy, and occupational therapy.

Reference libraries for doctors, managers, and nurses have been set up at each base hospital, and reserve equipment is held at these locations for use in emergencies. Group laundries are being established at strategic centres, and each hospital now has access to the services of a regional engineer. The Regional Plan has been the means of patients receiving a higher standard of medical and ancillary care throughout the State.

Nursing

The Commission has various responsibilities for nursing in Victoria. It decides in consultation with the Victorian Nursing Council whether any particular hospital will be made available for use as a training school in any branch of nursing; it determines the establishment of nursing staffs for hospitals; through the provision of bursaries it encourages prospective nurses to improve their general education prior to commencing training; it maintains a continuous nurse recruitment programme throughout Victoria; it produces publicity material including films on nursing; it directs a staff of nurses to relieve matrons in country hospitals for their leave and assists when urgent shortages of nursing staff occur; and it assists generally in nursing matters in hospitals.

Ambulance services

Under the *Hospitals and Charities Act* 1958 the Commission is charged with the responsibility of ambulance services in this State.

For adequate and efficient provision of ambulance services, Victoria has been divided into sixteen regions, each with regional committees elected by contributors, each committee being autonomous and responsible for the provision of service under its own constitution and by-laws. Each regional committee appoints a full-time superintendent/secretary as executive officer.

Strategically placed throughout the regions are branch stations, most of which are manned by full-time officers, the remainder operated by qualified volunteers. The headquarters station is based in the largest town in the region (generally a base hospital town) and provides maintenance facilities for its fleet of vehicles, backing up of service, and co-ordination of ambulance transport.

Common two-way radio communication is established in all the regional services and ensures direct communication throughout the State on all matters relating to persons in need of prompt medical attention.

Funds are provided by the Commission for both maintenance and capital purposes.

Particulars of the ambulance services from 1966-67 to 1969-70 are shown in the following table :

VICTORIA—AMBULANCE SERVICES

Particulars	1966-67	1967-68	1968-69	1969-70
Ambulances	282	283	290	300
Other vehicles	46	46	47	50
Staff	558	574	614	636
Contributors	361,095	345,462	333,333	346,513
Patients carried	280,695	273,475	270,372	317,993
Mileage travelled by ambulances	4,077,881	4,216,386	4,447,015	4,801,013
Maintenance grants	\$641,054	\$759,000	\$830,000	\$978,881
Capital grants	\$235,799	\$240,218	\$310,250	\$309,410

Medical education : the second medical school

In the late 1950s and early 1960s Victoria, in common with other States, experienced a shortage of medical graduates in metropolitan and country areas. The shortage was serious enough to lead to recruiting campaigns for general practitioners and medical specialists from abroad. While these were successful, the remedy was an expedient only and did not solve the real problem behind the shortage, nor did it create opportunities for additional admissions to the medical course. In 1960 the 127 medical students who graduated from the University of Melbourne were the sole Victorian source of medical graduates at that time. In the light of these facts the Victorian Government in February 1960 appointed a Committee on Medical Undergraduate Education in Victoria to advise it on medical undergraduate teaching with particular reference to teaching hospital affiliations with the University of Melbourne and proposed affiliations for the newly established Monash University. Melbourne, at that time, had four general teaching hospitals and four special teaching hospitals, all with university affiliations.

The Committee sought and received advice from the universities, the hospitals, medical bodies, teachers, and many individuals. It interviewed some forty persons and representatives of thirteen organisations or institutions; and its first Report was published and presented to the Government in August 1960. The Government approved of the Report in principle in January 1961, and as a result of recommendations made, a second School of Medicine admitted students at Monash University in March 1961. A Monash University Statute of 1959 had already made provision for a Faculty of Medicine to be established at Monash.

The Government in August 1961 reconstituted the Committee on Medical Undergraduate Education by adding three additional members to the original five. The new terms of reference sought recommendations upon the building works necessary at the hospitals, the magnitude and urgency of each proposal, together with the financial implications, and the priority which should be allotted to each. In December 1961 the Committee submitted its Report, which was approved by the Government and became the blueprint for building programmes necessary for medical undergraduate education at the teaching hospitals.

The second medical school resulted from the Committee's first Report in 1960. The co-operation from the hospitals allowed them to take students for the first time in some cases, to take a heavier load in others, and generally to align their teaching programmes to fit in with new concepts.

The Royal Melbourne and St Vincent's general teaching hospitals remained with the University of Melbourne, taking the full load of students previously shared amongst four general hospitals—160 per annum at the time. The Alfred and Prince Henry's Hospitals affiliated formally with Monash University, as did the Queen Victoria Memorial, a hospital new to the teaching group and housing several new Chairs, which accepted

responsibility for clinical paediatric and midwifery training and for some general medical and surgical training. The Royal Women's Hospital remained with the University of Melbourne as did the Royal Children's, although the latter continued to assist the Monash School with paediatric training during the early years. Fairfield Hospital still provides clinical training in infectious diseases for both University Schools as well as some general training. The Royal Victorian Eye and Ear Hospital retained its affiliation with the University of Melbourne and housed a new Chair of Ophthalmology and later a Chair of Otolaryngology.

Melbourne was fortunate in that the geography of its hospitals and universities dictated a logical and practical redistribution of affiliations, and in that it had a plan to meet a new situation under which the hospitals and universities were happy to co-operate.

New Chairs were created and an existing Chair moved from one hospital to another and new teaching departments were built, as were new departments to house the university and hospital facilities to provide for the needs of teachers and hospitals. Substantial financial grants were needed to provide these facilities and were provided by the Commonwealth and State Governments.

Between 1961 and 1969 the Commonwealth Government on the recommendation of the Australian Universities Commission made available \$4,581,110 towards the cost of buildings, equipment, and furnishings for clinical and allied facilities associated with teaching at hospitals. This was matched by an amount of \$4,581,110 provided by the Victorian Government as required by the Commonwealth Act. In the current triennium 1970-1972 inclusive, the Commonwealth Government has made provision for a sum of \$573,000 provided it is matched by the Victorian Government. In addition, the State of Victoria provided in the first triennium, 1961-1963 inclusive, an additional amount of \$2,246,984. In total, therefore, an amount of \$12,555,204 has been provided from government sources for teaching and allied facilities on hospital sites.

In its first year, 1961, the Monash School admitted 101 students of whom 30 graduated in 1966. The high failure was attributed largely to the limited time then available for careful selection at the admission stage. Monash determined that the maximum annual entry to the School should be 160, and this was achieved in 1966.

The University of Melbourne meanwhile decided to increase its student intake from 160 to 200. It affiliated with the Austin Hospital for this purpose in 1968 when the first students entered for their clinical training. New Chairs were established at the Austin Hospital, which embarked on a very large rebuilding programme. When circumstances permit, the University proposes to increase its annual student intake to the Austin so as to provide sixty students in their fourth year of the course and thereafter each year.

The result of these moves in terms of graduates has been very significant and in 1970, 274 students graduated from both universities. The peak, on the present intake, will be reached in 1974 when about 360 students are expected to graduate. In 1970-71 all vacancies for resident medical appointments in Victoria were filled.

It does not follow that all Victorian rural shortages of doctors will be filled from these sources as many doctors are not willing to practise in comparatively remote rural areas. This is one of the problems at present being studied by the Victorian Medical Advisory Committee. When the Victorian Medical Education Committee finished its original assignments, it

was enlarged and reconstituted by the Government as the Victorian Medical Advisory Committee with new terms of reference. It is in effect a standing committee established to inform and advise the Government upon the following topics :

1. Possible legislation to provide that medical graduates should spend one year of residence in an approved hospital before becoming eligible for registration as medical practitioners in this State. If such legislation were approved how should it be implemented and under what conditions?

2. (a) The existing shortage of resident medical officers in some hospitals, particularly those in the country ; the reasons for this shortage and the means which might be taken to meet it.

(b) The reluctance of doctors to practise in small country centres, particularly "one man" practices, either as locum tenentes or permanent occupants ; the reason for this and the means to meet it.

3. Whether the number of medical practitioners in this State is at present adequate to the need ; if not, where do the deficiencies exist and how might they be met? Will Victoria's need for medical practitioners be met through the programme recommended in the Medical Education Committee's two reports of August 1960 and December 1961, subsequently approved by the Government and implemented? If not, what measures should be taken?

4. The conditions under which patients are admitted to the Cancer Institute, and to investigate with the Board of the Institute and boards of the teaching hospitals, means by which medical education concerning cancer could be improved.

5. The quality and quantity of clinical material available in hospitals, and in particular, the suggestions raised in the Medical Education Committee Report in August 1960.

6. Other matters raised in the Medical Education Committee reports of August 1960 and December 1961.

7. Medical education generally, particularly in relation to the teaching hospitals, but without infringing upon the rights and functions of the universities.

The Committee has already made recommendations to the Government, particularly upon the community's need for doctors and how this relates to the output and projected output of graduates from the two Schools, as well as to the question of if, and when, a third School might be necessary. It is already evident that, based solely on the assessment of community requirements for doctors, there is no immediate need for a third medical school.

Hospital regional planning, 1962; Nursing training, 1962; Nursing recruitment, 1964; Care of the aged, 1965; Hospital architecture, 1966; Hospitals in medical education, 1967; Charities in Victoria, 1968; Care of the elderly, 1969; Rationalised medical services, 1971

Public hospitals and charitable institutions

Information dealing with the receipts, expenditure, accommodation, and inmates of public hospitals and subsidised charitable institutions in Victoria during the years 1965-66 to 1969-70 is contained in the following tables. The numbers of patients refer to the "cases" treated and not to persons. It is considered probable that some persons obtained relief from, or became inmates at, more than one establishment, but there is no information upon which an estimate of the number of these duplications can be based.

VICTORIA—NUMBER OF PUBLIC HOSPITALS AND CHARITABLE INSTITUTIONS(a)

Institution	At 30 June—				
	1966	1967	1968	1969	1970
Hospitals—					
Special hospitals (b)	12	12	12	12	12
General hospitals—					
Metropolitan	22	22	22	23	22
Country	112	112	112	112	112
Auxiliary hospitals	1	1	1	1	1
Convalescent hospitals	1	1	1	1	1
Hospitals for the aged	6	7	7	7	7
Sanatoria	2	2	2	2	2
Mental health institutions—					
Mental hospitals	10	10	10	10	10
Psychiatric and informal hospitals	9	9	9	10	11
Intellectual deficiency training centres	10	10	10	9	9
Total hospitals	185	186	186	187	187
Other institutions and societies—					
Infants' homes	8	8	8	8	8
Children's homes	36	35	35	35	36
Maternity homes	4	4	4	4	4
Institutions for maternal and infant welfare	3	4	4	4	4
Rescue homes	4	4	4	4	4
Benevolent homes	5	4	4	4	4
Institutions for the deaf, dumb, and blind	6	6	6	6	6
Hostels for the aged	11	12	11	11	11
Medical dispensaries	2	2	2	2	2
Total other institutions (c)	79	79	78	78	79

(a) Excluding infant welfare centres and bush nursing hospitals and centres.

(b) Special hospitals are those that have accommodation for specific cases only or for women and/or children exclusively and in this table include the Cancer Institute.

(c) In addition to the institutions shown above, which were under the control of one or other of the State's health authorities, there were, in 1970, 1,535 other institutions registered with the Hospitals and Charities Commission.

**VICTORIA—PUBLIC HOSPITALS AND CHARITABLE INSTITUTIONS(a) :
DETAILS OF SOURCES OF INCOME AND ITEMS OF EXPENDITURE
(\$'000)**

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
INCOME					
Government aid	77,360	83,784	90,078	100,271	112,962
Charitable contributions	4,968	4,784	4,788	5,545	5,328
Fees—					
Outpatients	3,734	3,464	3,177	3,397	3,733
Inpatients—					
Public	17,593	20,973	24,086	25,924	28,140
Private and intermediate	11,922	14,975	16,156	17,063	18,636
Other	9,557	9,034	12,102	11,729	13,188
Total	125,134	137,014	150,387	163,929	181,987
EXPENDITURE					
Salaries and wages	71,432	80,946	88,162	98,763	111,869
Other operating expenses	34,833	36,146	38,737	42,396	45,927
Non-operating expenses	1,393	1,841	1,651	1,917	2,119
Capital	17,123	19,369	21,166	18,826	21,169
Total	124,781	138,301	149,715	161,901	181,084

(a) Including infant welfare centres and bush nursing hospitals and centres.

**VICTORIA—PUBLIC HOSPITALS AND CHARITABLE INSTITUTIONS :
RECEIPTS AND EXPENDITURE
(\$'000)**

Institutions	1965-66	1966-67	1967-68	1968-69	1969-70
Hospitals (a)					
Receipts—					
Government	47,991	52,478	57,138	64,803	74,474
Patients (b)	28,929	36,103	39,850	42,199	45,472
Other	8,120	6,758	9,829	9,332	10,550
Total receipts	85,041	95,338	106,817	116,334	130,496
Expenditure—					
Salaries and wages	50,635	58,379	63,938	70,168	82,375
Capital	11,676	14,058	15,933	13,864	15,778
Other	22,161	23,974	25,877	29,678	31,024
Total expenditure	84,472	96,410	105,748	113,709	129,177
Sanatoria—					
Receipts (c)	1,330	1,394	1,399	1,414	1,357
Expenditure—					
Salaries and wages	808	864	903	925	935
Other	522	530	496	489	422
Total expenditure	1,330	1,394	1,399	1,414	1,357
Mental health institutions (d)—					
Receipts (c)	22,624	24,162	25,662	27,062	29,236
Expenditure—					
Salaries and wages	13,074	14,160	15,329	16,614	18,817
Capital	3,337	3,423	3,495	3,335	3,169
Other	6,212	6,579	6,839	7,113	7,250
Total expenditure	22,624	24,162	25,662	27,062	29,236
Other charitable institutions (e)—					
Receipts—					
Government	6,424	6,724	6,688	7,856	8,770
Patients (b)	3,976	3,115	3,315	3,810	4,656
Other	5,740	6,280	6,507	7,453	7,472
Total receipts	16,140	16,119	16,509	19,119	20,898
Expenditure—					
Salaries and wages	6,916	7,544	7,992	11,056	11,743
Capital	2,110	1,888	1,738	1,627	2,222
Other	7,330	6,903	7,177	7,034	7,350
Total expenditure	16,355	16,335	16,907	19,717	21,315
Total all receipts	125,134	137,014	150,387	163,929	181,987
Total all expenditure	124,781	138,301	149,715	161,901	181,084

(a) Hospitals include hospitals for the aged.

(b) Commonwealth Hospital Benefits payments are included in patients' fees.

(c) Sanatoria and mental health institutions are financed almost exclusively by government contributions.

(d) Includes mental hospitals, psychiatric and informal hospitals, and intellectual deficiency training centres.

(e) Infant welfare centres and bush nursing hospitals and centres are included under this heading.

VICTORIA—PUBLIC HOSPITALS : ACCOMMODATION AND INMATES, 1970

Institution	Number of beds in—		Daily average of occupied beds in—		Total cases treated in—		Outpatients (including casualties)
	Public section	Intermediate and private section	Public section	Intermediate and private section	Public section	Intermediate and private section	Cases treated
Special hospitals (a)	1,733	382	1,301	263	51,964	11,993	176,488
General hospitals—							
Metropolitan	3,450	1,419	2,682	1,064	84,754	57,624	365,791
Country	2,896	3,477	1,919	2,289	44,806	114,796	377,107
Auxiliary hospitals	419	10	395	1	2,821	12	129
Hospitals for the aged	3,497	..	3,237	..	6,551	..	..
Convalescent hospitals	32	12	31	12	62	17	..
Sanatoria	237	..	160	..	595	..	..
Total	12,264	5,300	9,725	3,629	191,553	184,442	919,515

NOTE. This table excludes mental hospitals, psychiatric and informal hospitals, and intellectual deficiency training centres.

(a) Special hospitals include the Cancer Institute.

Fairfield Hospital, 1961; Geelong Hospital, 1962; Royal Melbourne Hospital, 1962; Alfred Hospital, 1963; Prince Henry's Hospital, 1964; Royal Children's Hospital, 1964; History of Hospitals in Victoria, 1964; St Vincent's Hospital, 1965; Dental Hospital, 1965; Austin Hospital, 1966; Queen Victoria Memorial Hospital, 1967; Royal Victorian Eye and Ear Hospital, 1968

National health benefits

Information about the various types of benefits is set out on pages 520-4.

Victorian Nursing Council

The Victorian Nursing Council is the statutory body responsible for the supervision of training and registration of nurses in Victoria. The Council was established under the *Nurses Act* 1956 to replace the Nurses Board, Victoria, the original body established in 1923 to register general nurses. Midwives were first registered in 1915 by the Midwives Board, whose functions were transferred to the Nurses Board in 1928. Psychiatric nurses were registered from 1952 onwards and mental deficiency nurses from 1953. From 1951 to 1958 a register of mothercraft nurses was maintained by the Department of Health, and a roll of nursing aides by the Hospitals and Charities Commission.

The functions of the Council are to be responsible for registration of all branches of nurses and nurses agents; to supervise nursing education, standards of training, and examinations; and to supervise research and investigations into nursing matters.

The Council is appointed every three years. It has a membership of twenty-eight persons, comprising eighteen registered nurses, eight being elected by nurses and the others nominated by nursing bodies. The remaining ten members are nominated by the Departments of Health, Mental Health, Hospitals and Charities Commission, the Australian Medical Association, the Metropolitan and Country Hospitals Associations, and the Private Hospitals Association.

A register of nurses is maintained in basic branches and post-basic branches. The length of training varies according to the type of course. Although courses are prescribed also in orthopaedic and tuberculous diseases nursing and care of the pre-school child, they have fallen into disuse. Others in operating theatre, plastic surgery, and renal and intensive care nursing are conducted as inservice courses at some of the metropolitan hospitals. Training schools for nurses are subject to regular inspection by the Council's nursing officers. Entrance requirements for student nurses vary according to the type of course. Males and females are accepted for training except in midwifery, infant welfare, and mothercraft nursing, from which males are precluded. Only in psychiatric and mental deficiency nursing is there a significant proportion of males. A registration examination is required in all branches. In addition, general, psychiatric, and mental deficiency nurses are required to pass an examination before proceeding to the second year of training.

Only nurses holding current annual practising certificates may practise in the State of Victoria. At 30 June 1970 the number of names on each branch of the register and the number of current practising certificate holders, were as follows :

VICTORIA—REGISTRATION OF NURSES AT 30 JUNE 1970

Classification	Total registered	Total holding annual practising certificates
General nurses	39,536	20,304
Psychiatric nurses and mental deficiency nurses	2,039	1,128
Nursing aides	10,461	5,640
Mothercraft nurses	3,217	1,140
Total	55,253	28,212

At 30 June 1970 the number of hospitals and institutions approved as training schools, and the number of students in training, were as follows :

VICTORIA—NUMBER OF HOSPITALS AND INSTITUTIONS APPROVED AS TRAINING SCHOOLS, AND NUMBER OF STUDENTS IN TRAINING AT 30 JUNE 1970

Type of course	Hospitals and institutions approved as training schools	Students in training
Basic courses—		
General	37	4,435
Psychiatric	11	187
Mental deficiency	5	45
Nursing aides	60	941
Mothercraft	9	262
Total	122	5,870
Post-basic courses—		
Midwifery	13	629
Infant welfare	3	25
Infectious diseases	1	4
Eye, ear, nose, and throat	1	3
Gynaecological	1	4
Radiotherapeutic	1	10
Total	20	675

Victorian Bush Nursing Association

The Victorian Bush Nursing Association provides hospital and nursing facilities in country towns and districts throughout the State. A central council in Melbourne, comprising representatives of medical, nursing, and welfare bodies, country members, the Hospitals and Charities Commission, and business and professional men and women, administers the Association.

At 31 March 1970 there were forty hospitals with a total of 490 beds, and eighteen nursing centres, the latter being established at places unable to support a hospital, but able to maintain a trained nurse for consultation or visiting the sick.

During the year ended March 1970, 13,554 inpatients were treated in hospital—maternity 2,335, surgical and medical 11,219, and there were 12,126 outpatient treatments. There was one maternal death, and perinatal mortality was 20 per 1,000 live births. The total number of centre treatments was 29,172 : 16,688 visits by patients to the nursing centres and 12,484 visits by nurses to patients' homes.

**VICTORIA—BUSH NURSING HOSPITALS AND CENTRES :
RECEIPTS AND EXPENDITURE
(\$'000)**

Particulars	Year ended 31 March—				
	1966	1967	1968	1969	1970
RECEIPTS					
Government grants (a)	566	789	616	782	735
Collections, donations, etc.	69	82	112	96	148
Proceeds from entertainments	18	18	18	18	4
Patients' fees	665	828	932	1,049	1,193
Members' fees	49	55	56	55	52
Interest and rent	10	14	15	19	23
Miscellaneous	24	32	27	20	34
Total receipts	1,401	1,818	1,778	2,039	2,190
EXPENDITURE					
Salaries—					
Nurses (paid to central council)	506	675	760	778	837
Other	269	295	303	347	415
Provisions, fuel, lighting, etc.	148	177	188	204	216
Surgery and medicine	47	57	54	63	71
Repairs and maintenance	53	42	46	63	54
Furniture and equipment	72	23	27	28	16
Printing, stationery, etc.	19	23	23	29	32
Interest, rent, bank charges, etc.	4	6	6	6	8
Miscellaneous	61	78	105	94	125
Loan and interest repayments	19	17	15	20	12
Land and buildings	46	215	81	65	307
Alterations and additions	25	70	128	98	119
Total expenditure	1,269	1,680	1,736	1,797	2,211

(a) Includes \$34,000 received under the Hospital Benefits Scheme for 1966, \$39,000 for 1967, \$36,000 for 1968, \$31,000 for 1969, and \$34,000 for 1970.

The hospitals are registered by the Hospitals and Charities Commission as private hospitals. They are supported locally by patients' fees, membership fees, donations, and proceeds from auxiliaries. Through the Association, hospitals received government maintenance grants, amounting to \$400,000 in 1969–70. The money for approved capital works, such as buildings and new equipment, is initially raised locally, then subsidised by the State Government on a three for one basis. The government subsidy for capital works during the year 1969–70 was \$300,000.

Each bush nursing hospital elects its own committee of management at an annual meeting of members. Members pay a small annual fee, giving them the right to stand or vote for the committee of management and

entitling them also to a rebate on fees should they become patients. The nursing centres are also controlled by a local committee of management and members receive free treatment. The nursing centres receive financial assistance from the State Government through the Hospitals and Charities Commission, and from the Commonwealth Government through a Home Nursing Subsidy Grant.

Royal District Nursing Service

The Royal District Nursing Service was established in Melbourne in 1885 as the Melbourne District Nursing Society. At the time of its inception the need for such a service was extensive, not only because of limited hospital accommodation but also because of sub-standard housing, long work hours, and low incomes.

The Service is incorporated under the Hospitals and Charities Act as a philanthropic society and is subsidised by the State and Commonwealth Governments. Administration is from Melbourne, with centres at Camberwell, Essendon, Footscray, Frankston, Ferntree Gully, Melbourne, Moorabbin, and Preston. The work has expanded and almost 220 personnel are now employed.

Originally the Society's aim was to nurse the sick poor in their own homes, but owing to social changes and the introduction of more complicated and expensive forms of hospital, medical, and surgical treatment, the services of the district nurse have come to be made generally available. The Service now aims to provide comprehensive nursing service on a daily visiting basis. This includes active bedside nursing care, health teaching, rehabilitation nursing, provision of aids to nursing, linen service as deemed necessary, a limited chiropody service, and some degree of social assistance. Close liaison has been established with several of the major metropolitan hospitals to ensure continuity of nursing care according to medical orders. Patients are admitted to the care of the Royal District Nursing Service by direct referral from hospitals or general practitioners.

There have been great changes in the type of nursing service provided during the past decade for the care of the physically disabled and elderly. Every effort is now being made to encourage them to maximum independence and rehabilitation. There has been a noticeable increase in requests for service for the young physically handicapped, largely as a result of the high incidence of road accidents. This type of nursing is exacting and time consuming.

Over the years the mode of transport has graduated to motor vehicles, and each day 192 cars transport district nurses to their patients. At the present time there are 2,722 patients receiving visits, the total number of patients visited for the year ended 30 June 1970 being 16,536 with a total of 374,613 visits.

Walter and Eliza Hall Institute of Medical Research

In the early years of this century Professor Sir Harry Allen conceived the idea of a research centre where laboratory science would be related to medicine. This idea became a reality in the early 1920s when the Walter and Eliza Hall Institute of Medical Research was established. Since then the Hall Institute has rapidly developed into an independent establishment

which serves the community at large as an internationally renowned centre of medical research.

Medical research

The Institute's primary function is medical research embracing a field of diverse interests that all arise from the central theme of immunology, the branch of medicine dealing with immunity from disease.

There are six main research units each with its own unit head. The activities of these units are listed.

Cellular Immunology Unit

White blood cells are broken into two main groups : lymphocytes and phagocytes. This unit is concerned with the study of lymphocytes involved in making antibodies whose function is to destroy foreign cells such as transplants or cancer cells. In particular, study is concentrated on how lymphocytes are switched "on" and "off" by vaccine molecules, a knowledge which is vital if the body is to tolerate certain foreign material such as grafts and transplants. The unit has developed tissue culture methods allowing the study of the whole immune response to be conducted in precisely defined test tube systems.

Cancer Research Unit

This unit is devoted to the study of leukaemia and cancer of the immune defence cells of the body. Research in this group is concerned with the other important member of the white blood cell group, phagocytes, which have the power of guarding against bodily infection by absorbing and destroying pathogenic microbes. New techniques have been developed leading to increased understanding of how phagocytes are generated by the bone marrow and how disturbances in the system of growth regulation of white cells leads to development of cancer (leukaemia) and other diseases.

Experimental Pathology Unit

This unit is concerned with study of a special type of lymphocyte which comes from the thymus gland. Studies have revealed that while these cells do not actually form antibody themselves, they do in fact work together with the antibody-forming type of lymphocyte to protect the body against infections and cancer. By a special study of the mechanism of transplantation rejection and its specific immunological suppression in renal grafts, it is hoped (i) to elucidate the role of donor leukocytes in the immune response to kidney grafts in rats and mice and, (ii) to prevent the rejection of vascularised kidney grafts in rats and mice by specific immunosuppression.

Clinical Research Unit

The function of lymphocytes is to protect the body and destroy invading bacteria. Sometimes this system breaks down and lymphocytes "attack" the body's own tissues causing autoimmune diseases such as rheumatoid arthritis, pernicious anaemia, hepatitis, diabetes, and multiple sclerosis. The Clinical Research Unit is concerned with gaining deeper insight into autoimmune diseases in man. An important study, involving the isolation from normal brain tissue of a protein which causes a paralysing disease

when injected into experimental animals, has led to speculation that a parallel possibly exists between this experimental autoimmune disease and multiple sclerosis in humans.

Biochemistry and Biophysics Unit

This unit pursues the development of physical methods of separating various types of lymphocytes from each other and the understanding of the molecular mechanism in various immune reactions. It is anticipated that increased emphasis will be attributed to molecular biology in future research activity.

Immunogenetics Unit

The genetic aspect of immunology is one commanding wide attention and important studies of genetic factors involved in the development of certain types of cancers are in progress. This unit's activities centre around the analysis of the fine structure of antibody molecules and the genetic factors regulating the productions of these molecules in different individuals.

Postgraduate training

The Director of the Institute is Professor of Medical Biology at the University of Melbourne, and by virtue of this affiliation the Institute is responsible for the training of many students, national and international, for the degrees of Master of Science and Doctor of Philosophy. The education programme also covers medical laboratory technology and related fields.

Patient care

Skilled patient care is provided in the Clinical Research Ward at the Royal Melbourne Hospital where patients with complex diseases, particularly diseases of the immune system, can be scientifically investigated and treated. The Biomedical Computation Laboratory, a division of the Clinical Research Unit where patients' records are processed by computer, has a close liaison with this ward. Interesting experimental laboratory work is being carried out on computer-aided diagnosis.

New projects

It is intended to expand the Institute's research interests to include studies in the spheres of embryology and phylogeny. Little, if any, worthwhile information is available on why certain abnormalities occur in the new-born and it is hoped that detailed research in the field of embryology will provide the answers. Likewise, the phylogenetic study of lower vertebrate animals such as the toad could provide a valuable base for further studies in the province of the protein chemistry of antibodies.

Plans are also in hand for the breeding and maintenance of germ-free and specific pathogen-free mice in quantities sufficient not only to cover the Institute's present requirement of some 70,000 per year, but also to act as a central facility for other organisations using experimental animals.

Finance

The Federal and Victorian State Governments provide about half the Institute's current income. The remainder is financed by grants from Australian and overseas sources as well as donations from Australian companies and private individuals.

Cancer Institute

The Cancer Institute Board is incorporated under Part II of the Cancer Act, and is concerned with four aspects in combating cancer in Victoria. These aspects are :

1. *Research.* Stated clearly among the objects for which the Cancer Institute was established, research plays an important part in its activities. This research is directed towards the causation, prevention, diagnosis, and treatment of cancer.

2. *Diagnosis.* The diagnosis is particularly important to the treatment of cancer. Patients are referred to the Peter MacCallum Clinic (the name under which the Institute conducts its patient activities) by medical practitioners in general practice or by medical officers at hospitals. Early, complete, and accurate diagnosis of the patient's condition is important. To encourage early diagnosis, the Institute has been excused from imposing a means test on persons who come for examination, thus removing the concern over the financial costs of treatment.

3. *Treatment.* With its limited inpatient accommodation (110 beds at the Clinic in William Street, Melbourne), a high proportion of patients are treated as outpatients. Valuable assistance is given in this by the Institute's Visiting Nursing Service. Many patients, who otherwise would have had to be hospitalised, are able to remain in their own homes as a result of this service. The nurses visit the patient as often as may be necessary—during the day, in the evening, or at the weekend—changing dressings or linen, giving injections, bathing, or providing any other help that may be needed. This service is available to all cancer patients, irrespective of whether or not they are patients of the Institute.

4. *Education.* By an agreement with the University of Melbourne, the Institute has been accepted as a Special Teaching Hospital. The teaching of undergraduates is, however, only a part of the responsibility undertaken by the Institute in the field of teaching. Other important aspects relate to nursing—a 6 month postgraduate course for nurses in radiotherapeutic nursing—and to radiographers where the Training School for Therapy Radiographers can cater for up to sixty students at any one time of the three year course. The Institute was instrumental in setting up the Training School for Medical Nucleographers and Physicists, to cater for the Institute's needs in Victoria and Tasmania, as well as for overseas countries under the Colombo Plan.

Planning

Since its establishment in 1949 the Institute has established its physical facilities, equipment, procedures, and general technical competence. It has gained acceptance by the community and the medical profession. Its aim is now to achieve fully the objects for which it was established, largely through the development of multi-medical disciplines.

The Government of Victoria in 1969 reserved half of the site occupied by the Royal Mint in William Street for the Institute's development. This site, of 310 ft by 175 ft, adjacent to the existing Institute buildings, will permit a multi-storey building to be erected which would provide for a hospital catering for 450 to 600 inpatients. Located opposite the site for the proposed Flagstaff underground railway station, the Institute is in

a convenient position for patients, visitors, and staff. The Planning Committee of the Institute is working on this project.

Services

There is continuing co-operation, both within and without the Institute. Consultative clinics are held so that two or more medical specialists together can devise the best method of treatment for each individual patient. Radiotherapists from the Institute also attend other public hospitals in an honorary capacity, while medical teams visit a number of country hospitals on a regular basis to conduct clinics. In the same way, the Institute's Tasmanian Service provides a service to that State with departments at the Royal Hobart Hospital and Launceston General Hospital, and with regular clinics at Burnie, Devonport, and Ulverstone.

Treatment at the Clinic in Melbourne may involve one of the four linear accelerators now installed, or one of the small deep or superficial X-ray therapy units, or it may involve barotherapy or chemotherapy or surgery in the Reparative Surgery Unit. Joint consultation determines which one or combination of methods is in the best interests of the patient. For the convenience of patients, the Institute also provides deep and/or superficial X-ray therapy units at the Alfred and Austin Hospitals and in country hospitals at Geelong, Ballarat, Bendigo, and Mildura.

The following statistical information indicates the growth that has taken place between 1960 and 1970 :

VICTORIA—CANCER INSTITUTE

Particulars	1960 (a)	1969-70
Medical—		
Beds available including hostel	107	122
Inpatient admissions	1,785	3,416
New outpatients	4,907	4,939
Outpatient attendances	39,917	43,777
Therapy treatments	79,883	99,335
Visiting nursing service—visits	20,679	33,496
Outpatient transport service—mileage	141,684	151,214
Finance—		
Expenditure	\$1,268,198	\$3,056,580
Income	\$148,670	\$695,031
State Government grant	\$1,120,000	\$2,281,740
Personnel—		
Medical staff	46	74
Nursing staff	104	178
Scientific and technical staff	108	167
Other staff	232	328
Salaries and wages	\$934,634	\$2,287,933
Tasmania—		
Expenditure	\$33,504	\$113,583
Staff	9	16

(a) Prior to 1964-65 details are not available on a financial year basis.

Anti-Cancer Council of Victoria

The Anti-Cancer Council of Victoria was established in 1936 by Act of Parliament which entrusted the Council with the responsibility of co-ordinating all research in Victoria into the causation, prevention, and treatment of cancer ; with the promotion and financial support of such

research; and with the encouragement of measures designed to improve and facilitate treatment of persons suffering from cancer.

The Council conducts an active educational programme, with the co-operation of the State Departments of Health and of Education. Through this programme the Council aims to encourage patients with symptoms suggestive of possible cancer to present for treatment at the earliest and most curable stage. A continuous campaign is conducted to inform school children of smoking hazards and of the relationship between cigarette smoking and lung cancer.

Since 1967 the Council has conducted a campaign to encourage smokers to change to brands which yield lower quantities of tar and nicotine. A testing system has been established at Monash University and the Council regularly publishes the tar content of popular brands of cigarettes.

The Council provides advice and assistance for patients suffering from cancer who need help, financial or otherwise. Some 500 cancer patients are so assisted each year, involving an annual expenditure of \$30,000 to \$50,000.

The following table gives details of expenditure by the Anti-Cancer Council during the years 1965-66 to 1969-70:

VICTORIA—ANTI-CANCER COUNCIL: EXPENDITURE
(\$)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Research	162,977	151,843	174,104	176,682	176,636
Education	41,247	44,120	44,596	43,297	59,162
Patient aid	41,858	48,492	30,239	31,187	34,208
Other	44,845	43,782	46,142	52,750	66,836
Total expenditure	290,927	288,237	295,081	303,916	336,842

Medical research at University of Melbourne, 1964; National Heart Foundation of Australia (Victorian Division), 1964; Medical research at the Royal Women's Hospital, 1965; St Vincent's School of Medical Research, 1965; Medical research at Monash University, 1966; Melbourne Medical Postgraduate Committee, 1967; Epidemiological Research Unit, Fairfield Hospital, 1969; Asthma Foundation of Victoria, 1969; Paramedical services, 1969; Baker Medical Research Institute, 1970; Royal Children's Hospital Research Foundation, 1970; Commonwealth Serum Laboratories, 1971

Lord Mayor's Fund

The Lord Mayor's Fund was inaugurated by the Lord Mayor of Melbourne in 1923. The object of the founder was to rationalise and regularise the collection and distribution of voluntary contributions to support the hospitals and charities of Melbourne. There are two methods of operation: the Hospitals and Charities Sunday Committee and the Lord Mayor's Fund. The Hospitals and Charities Sunday Committee raises its funds from an annual "one day" appeal to parishioners (fourth Sunday in October) by means of specially printed offertory envelopes supplemented, latterly, by grants from church budgets.

The Lord Mayor's Fund does not employ collectors nor does it pay commissions. Its appeal is presented to the public as directly as possible by advertising, personal correspondence, or by voluntary speakers addressing groups.

The total annual receipts of the appeal and the fund during the period 1965-66 to 1969-70 were as follows :

**VICTORIA—LORD MAYOR'S FUND AND HOSPITALS
AND CHARITIES SUNDAY APPEAL : RECEIPTS**
(\$'000)

Year	Lord Mayor's Fund	Hospitals and Charities Sunday Appeal	Total
1965-66	513	57	570
1966-67	483	57	540
1967-68	493	55	547
1968-69	484	49	534
1969-70	490	48	537

SOCIAL WELFARE

Commonwealth social services

The principal social welfare benefits in Australia are provided by the Commonwealth Government under the Social Services Act which is administered by the Department of Social Services. Finance for the scheme is provided from the National Welfare Fund to which the Commonwealth Government appropriates from general revenue an amount equal to the expenditure from the Fund.

Expenditure in Victoria from the National Welfare Fund for the years 1965-66 to 1969-70 is shown in the following table:

VICTORIA—NATIONAL WELFARE FUND : EXPENDITURE
(\$'000)

Service	1965-66	1966-67	1967-68	1968-69	1969-70
Funeral benefits	282	358	362	407	382
Age and invalid pensions (a)	111,019	120,930	129,334	140,538	163,349
Widows' pensions	12,692	14,387	15,807	18,090	21,671
Maternity allowances	2,040	2,104	2,102	2,281	2,297
Child endowment (b)	49,235	56,232	52,675	54,133	62,419
Unemployment, sickness, and special benefits	3,434	4,238	4,734	4,557	4,824
Commonwealth rehabilitation service	427	461	493	590	725
Medical benefits	11,156	11,776	12,301	13,188	14,610
Medical benefits for pensioners	3,404	3,746	4,242	4,277	4,895
Hospital benefits (c)	13,349	15,208	16,672	18,947	24,496
Pharmaceutical benefits	18,951	21,138	20,031	22,385	26,863
Pharmaceutical benefits for pensioners	5,674	6,933	7,505	8,712	9,928
Nutrition of children	2,382	2,391	2,623	2,636	2,645
Handicapped children's benefits	..	..	..	7	83
Miscellaneous health services	104	474	391	362	461
Tuberculosis benefits	3,310	3,556	3,557	3,487	3,362
Home savings grants (d)	4,184	3,891	4,470	4,379	4,228
Other social services	..	..	..	241	483
Total	241,645	267,823	277,301	299,216	347,721

(a) Includes allowances for wives and children of invalid pensioners.

(b) In 1966-67 and 1969-70 there were five twelve-weekly payments instead of the usual four.

(c) Including nursing home benefits and hospital benefits for pensioners.

(d) Under the *Home Savings Grant Act 1964*.

Social security benefits

The benefits now provided under the Social Services Act, with the date of introduction of each in brackets, are : age pensions (1909), invalid

pensions (1910), widows' pensions (1942), unemployment, sickness and special benefits (1945), and sheltered employment allowances (1967), all of which are subject to a means test; and maternity allowances (1912) and child endowment (1941) which are not subject to a means test. The Act also authorises the operation of the Commonwealth Rehabilitation Service (1948) and the payment of funeral benefits (1943). Assistance to State Governments and eligible organisations is provided under the following Acts : The *State Grants (Deserted Wives) Act* 1968, the *Aged Persons Homes Act* 1969, the *State Grants (Home Care) Act* 1969, the *Handicapped Children (Assistance) Act* 1970, and the *Delivered Meals (Subsidy) Act* 1970.

General eligibility

In addition to satisfying the means test, a claimant for pension is required to complete a qualifying period of residence in Australia. This varies from ten years' continuous residence to qualify for the age pension to one year's residence immediately preceding her claim for a widow's pension where the woman and her husband were living permanently in Australia when he died. Widows' pensions are also paid to other categories of women who, for various reasons, no longer have a bread-winner. The section of the Social Services Act which disqualified an alien from receiving a pension was repealed in 1965.

The former separate means tests on income and property for age, invalid, and widows' pensions were merged in 1961 into a single means test which allows for interchangeability between a pensioner's income and the value of his property. In applying the means test to sheltered employment allowances, earnings from approved sheltered employment are treated more liberally than other forms of income.

A liberalisation of the means test was provided by the introduction in September 1969 of the tapered means test. This enabled all reduced rate pensions to be increased and greatly extended the upper limit of means which a person may have before being disqualified for a pension.

Age pensions

Age pensions, or old-age pensions as they were called from 1909 to 1947, were the first of the income security benefits to be introduced on a Commonwealth-wide basis. The rates of pension and the qualifying conditions have changed over the years and additional benefits have become payable but, fundamentally, the provisions have not altered greatly. The main essentials are, and have been, that pensions are granted subject to age and residence requirements, a means test on income and property and, until 1965, a nationality requirement.

Allowances which may be paid for one child and the non-pensioner wife of an age pensioner were introduced in 1943; additional pension for each other child was introduced in 1956; and, in 1965, a guardian's allowance became payable to a widower or other unmarried age pensioner with the care of at least one child. In 1958 supplementary assistance was introduced for "single" pensioners who pay rent. This assistance is payable subject to a means test differing from that applicable to the pension itself.

On 30 June 1970 there were 779,007 age pensioners in Australia (the Victorian total was 206,608), of whom over 70 per cent were women in both cases. The main reasons for the preponderance of women are that they may be granted age pensions five years earlier than men and that they generally live longer than men.

104,720 age pensioners in Australia (13 per cent of total age pensioners) were also receiving supplementary assistance. The proportion of age pensioners in the population of pensionable age has shown a long-term increase. At the 1911 Census the percentage was 32.0, and at the 1966 Census the percentage was 48.0.

Some people of pensionable age are receiving invalid or widows' pensions, or service pensions from the Repatriation Department.

Invalid pensions

The original Commonwealth pensions legislation contained provisions for invalid as well as age pensions and, though some of the qualifying conditions necessarily differ, the two schemes have many common characteristics. This applies more particularly to the means test provisions. As with age pensions, the conditions have changed over the years, but there have always been the fundamental requirements connected with age, incapacity, residence, income and property and, until 1965, nationality. Allowances for one child and a non-pensioner wife, additional pension for each child in excess of one, guardian's allowance, and supplementary assistance as for age pensions are applicable also to invalid pensions.

On 30 June 1970 there were 133,766 people in Australia receiving invalid pensions of whom 74,640 were men. The Victorian component was 29,753 of whom 16,917 were men. 50,931 invalid pensioners in Australia (38 per cent of total invalid pensioners) were also receiving supplementary assistance. The percentage of invalid pensions in the population on 30 June 1970 was 1.06.

The following table for Victoria illustrates the growth in numbers of, and expenditure on, age and invalid pensioners between 1965-66 and 1969-70 :

VICTORIA—AGE AND INVALID PENSIONS

Year	Pensioners			Total payments (a)
	Age	Invalid	Total	
				\$'000
1965-66 (b)	163,156	25,187	188,343	111,019
1966-67 (c)	166,138	26,779	192,917	120,930
1967-68	174,777	26,718	201,495	129,334
1968-69	183,776	26,625	210,401	140,538
1969-70 (c)	206,608	29,753	236,361	163,349

(a) Includes allowances for wives and children of invalid pensioners.

(b) By statistical adjustment pensions were corrected from invalid to age pension in 1965-66.

(c) Liberalisation of the means test resulted in a higher number of grants of pensions.

Sheltered employment allowances

These allowances were introduced in 1967 and are payable, in lieu of invalid pensions, to qualified disabled people engaged in approved sheltered employment. The means test is the same as for invalid pensions except

that, in the computation of income, more lenient treatment is given to earnings from sheltered employment. The additional payment associated with invalid pensions is also payable.

Widows' pensions

For widows' pensions purposes the term "widow" may include, in certain cases, a deserted wife, a divorcee, a woman whose husband has been imprisoned for at least six months, and a woman whose husband is in a mental hospital. Certain "dependent females" may also qualify. As with age and invalid pensions, there have been some changes in conditions but widows' pensions have always been subject to residence qualifications, to a means test on income and property, and, until 1965, nationality requirements.

On 30 June 1970 there were 86,921 widow pensioners in Australia.

Numbers and expenditure in Victoria between 1965-66 and 1969-70 are shown in the table below:

VICTORIA—WIDOWS' PENSIONS

Year	Number of widow pensioners	Total payments
		\$'000
1965-66	17,251	12,692
1966-67 (a)	18,481	14,387
1967-68	19,372	15,807
1968-69	20,349	18,090
1969-70 (a)	23,318	21,671

(a) Liberalisation of the means test resulted in a higher number of grants of pensions.

Funeral benefits

Where a pensioner is responsible for the funeral expenses of another pensioner, a recipient of a wife's allowance, a person receiving a tuberculosis allowance who is otherwise qualified for a pension, or his children or his non-pensioner spouse, he may qualify for a funeral benefit up to a maximum of \$40.

Where a person other than a pensioner is responsible for the funeral expenses of an age or invalid pensioner, or of a person receiving a tuberculosis allowance, a funeral benefit up to a maximum of \$20 may be granted.

Expenditure on funeral benefits during the year ended 1969-70 was \$1,512,000 for Australia, and \$382,000 for Victoria.

Maternity allowances

Except between July 1931 and June 1943, when a means test applied, maternity allowances have, since their introduction in 1912, been paid to mothers residing in Australia on the birth of a child. The one year's residence qualification is waived if the mother intends to remain permanently in Australia; in other cases, payment may be made when the mother has completed one year's residence. The amount of the allowance depends upon the number of other children under sixteen years of age in the mother's

custody, care, and control. The maternity allowance is additional to any Commonwealth health benefits.

The number of allowances paid annually increased steadily in the post-war years, reflecting the influence of the immigration programme and the increased number of births, until the peak number of 240,841 was reached in the year ended 30 June 1962. During the next four years the number fell away gradually to 224,311 for 1966. However, during the year ended 30 June 1970 the number of maternity allowances paid increased to 251,904, involving expenditure of \$8,000,321.

VICTORIA—MATERNITY ALLOWANCES

Year	Number granted	Total payments
		\$'000
1965-66	63,934	2,040
1966-67	66,098	2,104
1967-68	66,083	2,102
1968-69	72,304	2,281
1969-70	72,259	2,297

Child endowment

Child endowment is a continuing payment made to each person (usually the mother) who has the care of one or more children under sixteen years of age, or one or more qualified full-time students sixteen to twenty-one years of age. The rate of endowment for each child under sixteen depends upon the child's position in the family in relation to the other children under sixteen; a flat rate is paid for each qualified full-time student sixteen to twenty-one years of age. One year's residence in Australia is required if the mother and the child were not born here but this qualification is waived if the Department is satisfied that they intend to remain permanently in Australia.

When it was introduced in 1941 the Commonwealth scheme provided for child endowment to be paid at the rate of 50 cents a week for each child under sixteen years, other than the first, in a family. The rate was increased on two occasions and, in 1950, the first child was included at 50 cents a week. In January 1964 the rate for the third and subsequent children under sixteen in a family was increased to \$1.50 a week and a provision was made for endowment to be paid for each student over sixteen but under twenty-one years who is receiving full-time education at a school, college, or university, and who is not in employment or engaged in work on his own account.

In October 1967 a cumulative increase was made for the fourth and subsequent children under sixteen years in families, so that for each such child the rate is 25 cents a week more than for the next immediate older child. In October 1971 endowment was increased 50 cents for the third and later children.

In relation to children under the age of sixteen years the total number of endowed families in the Commonwealth on 30 June 1970 was 1,749,734,

and the number of endowed children in families was 3,864,659. There were also 20,069 endowed children under sixteen years and 573 students aged sixteen but less than twenty-one years in institutions. Expenditure for all endowed children for the year 1969-70 was \$220m.

VICTORIA—CHILD ENDOWMENT

Year	Number of endowed families	Number of endowed children in families (a)	Number of endowed children in institutions (a)	Number of endowed student children	Total payments
1965-66	443,753	982,651	5,027	51,366	\$'000 49,235
1966-67	453,872	1,000,722	5,231	54,199	(b) 56,232
1967-68	462,300	1,015,234	5,303	54,934	52,675
1968-69	472,693	1,041,713	5,462	69,563	54,132
1969-70	487,592	1,069,440	5,526	72,856	(b) 62,419

(a) Excludes endowed student children.

(b) There were five twelve-weekly payments made to the credit of bank accounts instead of the usual four during these years.

Unemployment, sickness, and special benefits

Legislation for these benefits was enacted in 1944 and the programme came into operation the following year. Rates of benefit were increased in 1952, 1957, 1961, and 1962, and permissible income was raised in 1957. In March 1962 the additional benefit for one dependent child was extended to all dependent children under the age of sixteen years in the family of the beneficiary.

Unemployment and sickness benefits are essentially short-term benefits. They are available to persons who are unemployed or who are temporarily incapacitated for work and thereby suffer loss of income. There is a means test on income, but none on property. The one year's residence qualification is waived where the Department is satisfied that the claimant intends to remain in Australia permanently. Liberalisation of the means test in 1969 provided for the recovery of sickness benefits from compensation in certain circumstances, and the waiting period of seven days for unemployment and sickness benefits was changed so that it is now only necessary to be served once in any period of thirteen weeks. Though qualifying conditions differ to some extent between unemployment and sickness benefits, both benefits have many common characteristics.

The number of unemployment benefits granted varies from one year to another according to the general employment situation and to dislocations in industry caused by industrial stoppages. During 1969-70 a total of 109,383 unemployment benefits were granted in Australia, and on 30 June 1970 there were 13,043 persons receiving benefit. Comparable figures for Victoria were 20,038 and 3,093.

Altogether 66,766 grants of sickness benefits were made in Australia during 1969-70 (15,682 in Victoria), and there were 8,813 persons on benefit at the end of the year (2,458 in Victoria). Total expenditure in the Commonwealth on unemployment, sickness, and special benefits in 1969-70 was \$18,592,000, expenditure in Victoria during the same period being \$4,824,000.

**VICTORIA—SOCIAL SERVICES : UNEMPLOYMENT, SICKNESS, AND
SPECIAL BENEFITS**

Year	Number admitted to benefit during year			Number receiving benefit at end of year			Amount paid in benefits during year		
	Un-employment	Sickness	Special (a)	Un-employment	Sickness	Special (a)	Un-employment	Sickness	Special (b)
							\$'000	\$'000	\$'000
1965-66	15,833	15,908	4,740	3,450	2,478	1,156	1,216	1,667	551
1966-67	23,373	16,716	6,245	4,159	2,612	1,203	1,882	1,753	603
1967-68	32,653	16,731	7,317	6,141	2,309	1,915	2,425	1,646	664
1968-69	27,172	13,798	7,856	3,608	2,199	1,763	2,246	1,473	838
1969-70	20,038	15,682	8,180	3,093	2,458	1,216	1,795	1,956	1,073

(a) Includes migrants in reception and training centres.

(b) Includes amounts paid to migrants in reception and training centres.

Miscellaneous benefits and services

In addition to the normal benefits there are a number of other concessions and services available to pensioners, such as the pensioner medical service, the subsidised medical service, hearing aids for pensioners, telephone rental concessions, and radio and television licence concessions, etc.

Commonwealth Rehabilitation Service

Rehabilitation is provided free to (1) those receiving or eligible for an invalid or widow's pension; (2) those receiving or eligible for a sickness, unemployment, or special benefit; (3) those receiving a tuberculosis allowance; (4) discharged national servicemen who are disabled but ineligible for repatriation assistance; and (5) boys and girls of fourteen or fifteen years who, without treatment or training, would be likely to qualify for an invalid pension at sixteen.

Persons are chosen from these groups if the disability is a substantial handicap for employment but is remedial (except in the case of the blind), and if there are reasonable prospects of the person going to work within three years of starting treatment or training.

Training and living-away-from-home allowances may be paid, and artificial aids and appliances are supplied free.

During 1969-70, 1,520 persons were accepted for rehabilitation, 291 of them being in Victoria; 1,308 were placed in employment, 259 of them being in Victoria. Expenditure on rehabilitation in Victoria during the year was \$653,853.

Assistance for organisations

The Commonwealth will also provide financial assistance to eligible organisations such as religious, charitable, or benevolent organisations, Commonwealth-wide ex-servicemen's organisations, and municipal councils for approved activities. These include homes for the aged, personal care subsidies, delivered meals subsidies, handicapped children's subsidies, and sheltered workshop assistance.

Aged Persons Homes Act

The Aged Persons Homes Act was introduced in 1954 and allows for

Commonwealth grants to eligible charitable and benevolent organisations, or organisations of a similar nature, towards the capital cost of approved homes for aged people, including the cost of the land. The grants were originally on a \$1 for \$1 basis but were increased to \$2 for \$1 in 1957. In 1967 local governing bodies were included as eligible organisations and grants became available for nursing accommodation providing up to half the total number of residential beds was supplied by the particular organisation in the same city or town. An important requirement for a grant of subsidy is that the conditions of the home approach as nearly as possible ordinary domestic life for the aged residents.

Since the commencement of the Act, 2,035 grants amounting to \$106m had been approved to 30 June 1970. The projects gave accommodation to 35,922 aged persons. In Victoria, 538 grants had been approved amounting to \$29m. These grants involved subsidised accommodation for 9,454 aged persons.

An amending Act passed during 1969 provided for payment of a Personal Care Subsidy to approved homes. Homes where residents are provided with all meals and where staff is employed to assist those who need help with bathing, dressing, personal laundry and the cleaning of their rooms, and those who need help with medication, may be approved for subsidy. A staff member is required to be available at all times to give assistance in the case of emergency. The amount of subsidy paid is \$5 a week payable at four-weekly intervals on the basis of the number of persons aged 80 and over residing in the approved accommodation. Up to 30 June 1970, 317 homes had been approved for subsidy in Australia and the subsidy paid was \$1,132,680. In Victoria the number of homes was 95 and the subsidy paid \$333,180.

Delivered Meals Subsidy Act

The Delivered Meals Subsidy Act assented to in April 1970 is to help organisations establish, maintain, expand, and improve approved "meals-on-wheels" services.

The subsidy is paid on the basis of 10 cents for every meal provided by an eligible organisation during the previous calendar year.

Non-profit religious, charitable, benevolent, and welfare bodies not controlled by the Commonwealth or State Governments may apply for the subsidy. Local government bodies may also apply. Up to 30 June 1970 the number of approved organisations in Australia was 191, the number of meals served 1,955,477, and the amount granted \$195,555. The Victorian totals were 51 approved organisations, 488,525 meals, and the amount granted \$48,855.

Handicapped Children (Assistance) Act

This Act came into operation in June 1970 and involves the Commonwealth in a new area of welfare and creates another departmental link with voluntary agencies and community service groups. The Act provides for subsidies of \$2 for \$1 to be paid to eligible organisations towards the capital cost of premises to be used for the training of handicapped children ;

the cost of equipment to be used for or in connection with such training; and the capital cost of residential accommodation for handicapped children receiving training. Up to 30 June 1970 insufficient time has been available for any grants to be made since the commencement of the operation of the Act.

Sheltered Employment (Assistance) Act

This Act was introduced in 1967 and provides for grants of \$2 for \$1 toward the capital cost or rental of premises used to provide sheltered employment, the cost of workshop equipment and the capital cost of hostels or similar accommodation for disabled persons engaged in sheltered employment. During the year 1969-70 there were 31 new workshop premises declared in Australia (3 in Victoria). The total number of grants approved in Australia was 359 and the amount approved \$1,483,217. The Victorian share was 21 grants for \$234,109.

Special assistance to State Governments

State Governments may be reimbursed up to 50 per cent of the amount they spend on approved home care service schemes and senior citizens centres. A scheme may be initiated and conducted by the State Government, local councils, community organisations, or any two, or all of these acting conjointly. Assistance may also be given to the States under the States Grants (Deserted Wives) Act in respect of aid for mothers with children where they are not eligible for normal benefits.

States Grants (Home Care) Act

This Act introduced in 1969 provides financial assistance for States developing home care services mainly for the aged, and for the States developing senior citizens centres. It also enables the Commonwealth to pay half the salary of a welfare officer co-ordinating home care services run by, or in association with, senior citizens centres. During the year 1969-70 payments of only \$47,850 had been made to some States under the Act, although a number of approvals in principle had been given. There were no payments made to Victoria during the period.

State Grants (Deserted Wives) Act

This Act came into operation with retrospective effect from 1 January 1968. It provides for assistance to be given by the Commonwealth to the States in respect of aid for mothers with children where the mothers are not eligible for benefits under the Social Services Act. Broadly, these include deserted wives during the first six months of desertion, wives during the first six months of the husband's imprisonment, deserted *de facto* wives and *de facto* wives of prisoners, and unmarried mothers who are ineligible for the Commonwealth widow's pension.

The type of assistance attracting a Commonwealth grant includes that provided in the form of cash, food, or clothing.

The grant by the Commonwealth is half the cost of the approved assistance paid to the mother or half the amount of Class A widow's pension which would have been payable had she been qualified to receive it, whichever is the less.

The State of Victoria did not participate in the scheme in 1968-69, but commenced to take part in April 1970 so that all States are now receiving

assistance under the scheme. The expenditure under the Act during 1969-70 was \$1,882,133 for the Commonwealth and \$100,541 for Victoria.

Reciprocal agreements

The Social Services Act provides for the Commonwealth to enter into reciprocal agreements with the government of any other country in matters concerning pensions and benefits under the Act. Arrangements of this kind have been made with New Zealand and with Britain.

The general basis of these agreements is that residence in New Zealand or Britain may be treated as residence in Australia. In return, Australians who go to those countries for permanent residence receive concessions enabling them to qualify for equivalent benefits there.

Comprehensive coverage of all social service benefits available may be obtained in annual reports, handbooks, and pamphlets issued by the Commonwealth Department of Social Services.

History of social services, 1962; Sheltered employment assistance, 1969

Repatriation Department

The Repatriation Department is responsible, subject to the control of the Minister for Repatriation, for the administration of the Repatriation Act and associated legislation designed for the care and welfare of ex-servicemen and women, and the dependants of those who have died as a result of their war service. The main responsibilities of the Department concern pensions and medical treatment; other functions include the education and training of children of certain ex-servicemen, the provision of gift cars for some severely disabled ex-servicemen, the payment of funeral grants for specified classes of ex-servicemen and their dependants, and various other forms of assistance.

War pensions

War pensions, introduced under the *War Pensions Act* 1914, are intended to provide compensation for ex-servicemen and women who have suffered incapacity as a result of their war service, for their eligible dependants, and also for the dependants of those who have died as a result of war service.

War pensions for incapacity are paid in accordance with the assessed degree of disablement suffered by the ex-serviceman; they are not subject to any means test or to income tax. The term "disablement" includes such factors as physical or mental incapacity, pain and discomfort, a lowered standard of health, and inability to participate in normal recreations.

Pensions are payable to the wife of a disabled war pensioner and to his children under sixteen years of age at appropriate rates according to the ex-serviceman's assessed degree of incapacity.

If an ex-serviceman's death is accepted as being due to his war service, or if, at the time of his death, he was receiving the special rate of war pension, or the equivalent rate payable to certain double amputees, a war widow's pension is paid to his widow, and pensioners are also paid for each child under sixteen years of age. Eligible war widows also receive an additional payment known as a domestic allowance. Excluding 631 pensions paid to miscellaneous personnel, there were 584,676 war pensions payable to ex-servicemen and their dependants at 30 June 1970, and the annual

expenditure on both types of pension was \$183,454,033. Of these pensions, 159,114 war pensions and 154 miscellaneous pensions were payable in Victoria and the annual expenditure was \$51,297,006.

Service pensions

In addition to compensatory payments for war caused incapacity and death, the Repatriation Department introduced service pensions in 1936. This type of pension is paid, subject to a means test, to an ex-serviceman who has served in a theatre of war, and who either has attained the age of 60 years (55 years in the case of an ex-servicewoman) or who is permanently unemployable. A service pension may also be paid to an ex-serviceman suffering from pulmonary tuberculosis, irrespective of the area in which he served, and to a veteran of the Boer War. The same means test is applied to service pensions as to social services age or invalid pensions. Service pensioners are also eligible to receive a wide range of medical benefits for disabilities not related to their war service.

VICTORIA—WAR AND SERVICE PENSIONS

Year	Members of forces—						Dependants—			Amount paid during year
	South African war veterans	First World War	Second World War incl. native members and interim forces	Korea-Malaya	Other (a)	Total	Of incapacitated members	Of deceased members	Total	
										\$'000
WAR PENSIONS										
1965-66	..	12,738	49,178	651	219	62,786	102,125	16,718	118,843	49,602
1966-67	..	11,744	49,426	658	275	62,103	97,117	16,884	114,001	46,953
1967-68	..	10,824	49,560	685	405	61,474	92,107	16,939	109,046	47,216
1968-69	..	9,830	49,358	697	514	60,399	87,422	17,024	104,446	51,654
1969-70	..	8,903	49,152	717	774	59,546	82,671	17,051	99,722	51,297
SERVICE PENSIONS										
1965-66	40	9,766	2,752	7	3	12,568	3,065	562	3,627	6,626
1966-67	23	9,437	3,261	8	11	12,740	3,152	531	3,683	6,720
1967-68	18	9,066	3,868	9	11	12,972	3,414	556	3,970	7,420
1968-69	16	8,462	4,394	8	11	12,891	3,086	584	3,670	8,070
1969-70	12	8,409	5,710	12	15	14,158	3,538	611	4,149	9,767

(a) Includes Far East Strategic Reserve, Special Overseas Service, Seamen's War Pensions, and Act of Grace Pensions.

Medical care

An extensive range of treatment is provided through general practitioners under the Department's Local Medical Officer Scheme at the Repatriation outpatient clinics, and by specialists in the various branches of medicine who have been appointed to departmental panels. At 30 June 1970 there were 6,063 doctors participating in the Local Medical Officer Scheme, of whom 1,639 were practising in Victoria.

Treatment for inpatients is available at Repatriation General Hospitals in all States except Tasmania. Inpatient treatment may also be provided, under certain conditions, in country hospitals at departmental expense. For patients requiring long term treatment an Anzac Hostel is maintained in Victoria.

In each State of the Commonwealth there is a Repatriation Artificial Limb and Appliance Centre, where artificial limbs and surgical aids are provided for those eligible. The services of these centres are also extended to other Commonwealth Government departments and agencies, and, to the extent that production can be made available, to State Government departments and philanthropic organisations, and to private persons who cannot be fitted satisfactorily elsewhere.

The Department maintains its own pharmacies at Repatriation hospitals and outpatient clinics, and arranges for the dispensing of prescriptions of Local Medical Officers through local chemists. Through its Local Dental Officer Scheme, comprising some 2,830 dentists throughout Australia, and dental units located at its institutions, a full range of dental services is provided for those eligible. A comprehensive rehabilitation and social worker service, under which programmes for the rehabilitation and social care of departmental patients are carried out, is also available.

Under agreements with State Governments, psychiatric patients requiring custodial care are admitted at departmental expense to separate Repatriation psychiatric wards administered by State authorities. In addition, the Department provides a full range of ancillary services including physiotherapy, chiropody, speech therapy, rehabilitation, and social worker services.

Medical treatment is provided for all disabilities which have been accepted as due to war service. In addition, and subject to certain conditions, treatment is provided for disabilities not due to war service.

Institutions

The largest of the Department's institutions in Victoria is the Repatriation General Hospital at Heidelberg. This institution is a recognised postgraduate training centre and teaching seminars are held weekly. Training facilities at the hospital include schools for student nurses and nursing aides. Training is also given in pathology, radiography, pharmacy, and social work. At 30 June 1970 the number of staff employed full-time at the hospital was 1,334 and during 1969-70, 11,086 patients were treated at the hospital with an average stay of 21.5 days per patient.

The other institutions conducted by the Department in Victoria are the Outpatient Clinic, St Kilda Road, Melbourne; Anzac Hostel, North Road, Brighton; Repatriation Artificial Limb and Appliance Centre, South Melbourne; and Macleod Hospital, Mont Park.

Education and training

Soldiers' Children Education Scheme

With the assistance of a voluntary Education Board in each State, the Department administers the Soldiers' Children Education Scheme introduced in 1921. The object of this scheme is to encourage and assist eligible children to acquire standards of education compatible with their aptitudes and abilities and to prepare them for suitable vocations in life. Assistance is provided under the scheme for the children of ex-servicemen whose deaths have been accepted as due to war service, or who, as a result of war service, are blinded or totally and permanently incapacitated.

Disabled Members' and Widows' Training Scheme

Ex-servicemen who are substantially handicapped through war-caused disabilities, and for whom vocational training is necessary for their satisfactory re-establishment, may be assisted under the Disabled Members' and Widows' Training Scheme, introduced in 1953. Training is also provided for the widow of an ex-serviceman whose death is due to war service, where it is necessary to enable her to follow a suitable occupation.

Korea and Malaya Training Scheme

Under this scheme, eligible ex-servicemen who served in the Korea and Malaya operations could train for professional, industrial, or rural occupations. The time limit for lodging applications for training under this scheme has now expired but trainees who are still undertaking courses are eligible to have their fees paid at training institutions for an allowance towards the cost of essential books, equipment, and fares. A weekly training allowance is payable for full-time trainees.

Re-establishment benefits for National Servicemen

Subject to prescribed conditions, special re-establishment benefits are provided for National Servicemen under the Defence (Re-establishment) Act. These benefits apply to all National Servicemen whether they have served on "Special Service" or on any other service, and ensure that servicemen will not be at a disadvantage on their return to civil life. The scheme includes appropriate full or part-time training as a supplement to skills acquired in the Army, refresher training for specialists, and training for those who, for various reasons, may not be able to return to their former employment. The assistance includes payment of tuition fees, other associated fees and fares, and provision of appropriate books and equipment. A training allowance is also provided for trainees undertaking full-time studies.

Re-establishment loans may be granted, subject to certain conditions, to those National Servicemen who prior to call-up were engaged in business practice or agricultural occupations, or who, because of their call-up, were prevented from engaging in these occupations, and who need financial assistance for their re-establishment in civil life. The maximum amounts of the loans are : business and professional \$3,000, and agricultural \$6,000.

General assistance

The Department also provides various other forms of assistance for certain classes of ex-servicemen and their eligible dependants. These benefits include : gift cars and driving devices for some seriously disabled ex-servicemen ; funeral benefits ; immediate assistance ; business re-establishment loans and allowances ; and recreation transport allowances.

National health benefits

The year 1969-70 saw the culmination of a comprehensive review of the medical benefits system, with the introduction of the new Health Benefits Plan. In addition to its provisions for the payment of higher rates of Commonwealth and health fund medical benefits, the *National Health Act* 1970 introduced new measures concerned with administration of medical and hospital benefits organisations and provided for increased assistance towards the cost of health insurance for families on low incomes.

The most significant effect of the new legislation was the establishment of the combined Commonwealth and medical fund benefits at levels which provided contributors with substantially improved coverage against the cost of any type of medical service based on "a common fee for services rendered" concept. The common fee was determined from a survey which resulted in a list of fees which represented those most commonly charged by doctors in each State and covered more than 1,000 medical services.

At 30 June 1970 in Victoria, 88 per cent of the population were covered under varying rates of hospital benefits, and 84 per cent for medical benefits. These percentages exclude pensioners of various types, persons covered by repatriation provisions, the indigent, and others of non-insurable nature.

Subsidised medical services

On 1 January 1970 the Commonwealth Government introduced a new subsidised health insurance which enabled families on low incomes, persons receiving unemployment, sickness, and special benefits, and newly arrived migrants (for medical and hospital expenses incurred during their first two months in Australia), to receive special assistance in obtaining health insurance cover. From 1 July 1970 when the *National Health Act* 1970 commenced operating, subsidised health insurance became available to many more low income families.

The following benefits are now available. Families whose weekly incomes do not exceed \$46.50 can receive free medical benefits and public ward hospital cover. Families with incomes above \$46.50 but not exceeding \$49.50 need to pay only one third of the normal health insurance contribution rate for the new benefits coverage and for coverage against public ward charges in hospitals. Families with incomes above \$49.50 but not exceeding \$52.50 need to pay two thirds of the usual contribution rate for this coverage.

Persons receiving unemployment, sickness, or special benefits under the Social Services Act are eligible for full medical benefits and a scale of hospital benefits equal to the charge made to patients in public wards of public hospitals.

Migrants intending to settle in Australia are eligible for assistance towards meeting any medical or hospital costs during their first two months in Australia.

During the first six months operation of the scheme from 1 January to 30 June 1970 Commonwealth benefit and fund benefit reimbursements to organisations amounted to \$536,000 in Australia (\$138,000 in Victoria) for hospital benefits, and \$195,000 in Australia (\$33,000 in Victoria) for medical benefits.

Hospital and nursing home benefits

Hospital benefits, introduced in 1946, are available to patients receiving treatment in public and private hospitals approved under the National Health Act.

Insured patients, who are those fulfilling the conditions of eligibility regarding contributing to a hospital benefit fund registered under the National Health Act, or a dependant of any such person, are entitled to a Commonwealth hospital benefit of \$2 a day. The benefit is paid through the contributor's registered benefit organisation. Generally, the Commonwealth

hospital benefit is paid to the contributor together with the fund benefit to which he is entitled.

A Commonwealth benefit of \$2 a day is also paid direct to hospitals who make no charge to patients whether they are insured or not (for instance, infectious disease hospitals). Where a public hospital does not charge any fees for an eligible pensioner or a dependant of such a person who is a public ward patient, the Commonwealth pays the hospital a benefit of \$5 a day. Eligible pensioners are those who are in possession of a Pensioner Medical Service entitlement card.

For uninsured patients a Commonwealth benefit of \$0.80 a day is paid direct to the hospitals, the same amount being deducted from the patients' accounts.

A Commonwealth nursing home benefit of \$2 a day is paid for a qualified patient who receives nursing home care in a convalescent home, rest home, or similar institution which is approved under the National Health Act. An additional \$3 a day is payable to those patients requiring and receiving intense nursing home care as distinct from the normal nursing care usually provided for the majority of patients in such homes. The benefit is paid whether or not the patient is insured. It is paid direct to the hospitals and the same amount is deducted from the patient's account.

The following table shows details of registered organisations, members, and benefits for the years 1965-66 to 1969-70 :

VICTORIA—HOSPITAL AND NURSING HOME BENEFITS

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Hospital benefits—					
Number of registered organisations	44	43	42	40	37
Number of members ('000)	1,024	1,063	1,092	1,191	1,208
Benefits paid—	\$'000	\$'000	\$'000	\$'000	\$'000
From registered organisations' funds (a)	13,777	17,870	21,353	26,800	31,643
Commonwealth benefits (b)	8,255	9,509	10,549	11,080	11,136
Nursing home benefits—					
Commonwealth benefits	4,640	4,884	5,122	(c)6,468	(c)10,052
Total benefits	26,672	32,263	37,023	44,348	52,831

(a) Includes ancillary benefits.

(b) Excludes special account deficits.

(c) Increase is partly due to supplementary benefits scheme introduced on 1 January 1969.

Medical benefits

Commonwealth medical benefits, which were introduced in 1953, are paid for medical expenses incurred by persons who are contributors to registered medical benefits organisations, or by the dependants of such contributors. A medical fund contributor has to meet only 80 cents of the common fee for general practitioner consultations and \$1.20 of the common fee for general practitioner home or hospital visits. Higher benefits are paid for specialist consultations if the patient is referred by another practitioner. Medical benefits are payable for certain services by oral surgeons and are payable at the higher specialist rate on referral to an ophthalmologist by an optometrist. The higher specialist rate of benefits is also payable on referral to a medical specialist by a dentist.

A contributor bears no more than \$5 of the common fee of an operation performed by a general practitioner or by a specialist where the patient is referred by another practitioner. Differential rates of benefits are paid for over 300 services which are customarily performed by either a general practitioner or a specialist. Where an operation involves other direct services, including the administration of an anaesthetic, the contributor bears no more than \$5 of the combined common fees.

To ensure that all contributors are adequately covered against the cost of medical treatment, to eliminate any confusion or uncertainty as to the level of cover provided, and to simplify administration, only one table of medical benefits and three tables for hospital benefits (related to standard, intermediate, and private ward charges) operate in each State. All funds pay medical benefits at the same rate, but contribution rates may vary between funds depending on their financial position.

VICTORIA—MEDICAL BENEFITS

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70 (a)
Number of registered organisations	20	19	19	19	19
Number of members ('000)	930	969	1,010	1,104	1,126
Number of services received ('000)	8,000	8,086	8,602	9,210	10,084
Benefits paid during year—	\$'000	\$'000	\$'000	\$'000	\$'000
From registered organisations' funds (b)	10,814	12,116	13,167	14,747	17,288
Commonwealth benefits (c)	11,030	11,644	12,183	13,052	14,371
Total benefits	21,844	23,760	25,350	27,799	31,659

(a) Excluding details of benefits of the subsidised medical services scheme.

(b) Including ancillary benefits.

(c) Excluding payments towards special account deficits.

Pharmaceutical benefits

Under the Pharmaceutical Benefits Scheme, which was introduced in 1948, all prescriptions written in accordance with the regulations were available to the general public for the payment of a fee of 50 cents. From 1 November 1971 the fee was increased to \$1. For persons enrolled under the subsidised Health Insurance Scheme, the fee is still 50 cents. Pensioners who are enrolled in the Pensioner Medical Service, and their eligible dependants, receive these prescriptions free of charge. Pharmaceutical benefits are supplied by approved pharmaceutical chemists on prescriptions of medical practitioners, but in areas where there is no approved chemist, a medical practitioner may be approved to supply pharmaceutical benefits.

Provision is made to approve hospitals for supplying pharmaceutical benefits and most public hospitals are thus approved. A few of the larger private hospitals having diagnostic facilities are similarly approved.

The drugs and medicinal preparations available as pharmaceutical benefits are determined by the Commonwealth Minister of Health on the advice of the Pharmaceutical Benefits Advisory Committee. Within the list of benefits so determined, a doctor may prescribe, subject to any restriction on its use as a benefit, the drug of his choice in the treatment of his patient.

The following table gives details of pharmaceutical benefits granted in Victoria during the years 1965-66 to 1969-70 :

VICTORIA—PHARMACEUTICAL BENEFITS

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
	'000	'000	'000	'000	'000
Number of prescriptions	12,947	14,136	14,296	15,885	17,301
Cost of prescriptions—	\$'000	\$'000	\$'000	\$'000	\$'000
Commonwealth contribution—					
Pensioners	5,674	6,933	7,505	8,712	9,928
Other population	14,872	16,040	15,821	18,112	20,744
Payments to hospitals and miscellaneous services	4,000	5,000	4,103	4,160	6,000
Patients' contributions	4,767	5,087	5,045	5,587	6,089

Pensioner Medical Service

The Pensioner Medical Service, which commenced in 1951, is a general practitioner medical service provided free of charge to eligible pensioners and their dependants. Under this service the participating doctors provide medical attention of a general practitioner nature, such as ordinarily rendered by a general practitioner in his surgery or at the patient's home, to enrolled pensioners and their dependants. In addition to the general practitioner service given to enrolled pensioners, the full range of medicines of the Pharmaceutical Benefits Scheme is available free of cost from a chemist on presentation of a doctor's prescription. Persons eligible for the Pensioner Medical Service are persons receiving an age, invalid, or widow's pension under the Commonwealth Social Services Act, or a service pension under the Repatriation Act, subject to a means test, and persons receiving a tuberculosis allowance under the Tuberculosis Act. Wives, children under sixteen years of age, and children who have attained the age of sixteen years but who are under the age of twenty-one years and are receiving full-time education at a school, college, or university, who are dependants of persons who are eligible, may also receive the benefits of the Pensioner Medical Service.

VICTORIA—PENSIONER MEDICAL SERVICE

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Number of pensioners and dependants enrolled ('000)	252	260	282	294	303
Number of participating doctors	1,661	1,733	1,767	1,768	1,740
Number of services—					
Surgery ('000)	1,074	1,232	1,379	1,449	1,594
Domiciliary ('000)	817	878	870	832	814
Payments to participating doctors for medical services (\$'000)	3,379	3,721	4,218	4,251	4,869

Handicapped children's benefit

The handicapped children's benefit scheme provides for the payment of \$1.50 a day on behalf of each handicapped child, under the age of sixteen years, who is residing in a home approved under the National Health Act as a handicapped persons' home.

Ministry of Social Welfare

The *Social Welfare Act* 1970 established a separate Ministry of Social Welfare under a newly appointed Minister. The Social Welfare Department (previously a branch of the Chief Secretary's Department) is administered by a Director-General.

In addition to a central administration which is primarily responsible for the whole Ministry there are the following divisions: Family Welfare, Youth Welfare, Prisons, Probation and Parole, Training, and Research and Statistics.

Family Welfare Division

This Division is administered by the Director of Family Welfare. It is responsible for providing family welfare, child care, and associated services. These services include preventive services and family counselling.

The Family Counselling Section provides an advisory service for the benefit of persons with family problems. Its prime aim is to prevent the disruption of the family unit and to lessen the effects of any breakdown that may take place. During 1970-71, 5,719 approaches were made to the Section; at 30 June 1971, 960 cases were active.

A parent or other person who has the custody of a child under fifteen years of age can apply for family assistance payments and associated benefits. The age limit can be extended if the child continues at school full-time. Those who are eligible for a pension from the Commonwealth Social Service Department, or who have readily realisable assets exceeding \$500 plus \$100 for each dependent child, are not eligible to apply. As from 1 October 1971 the following categories of persons were eligible for assistance.

Deserted wives and the wives of prisoners are eligible for a widow's pension from the Commonwealth Social Services Department after they have been deserted for six months or if their husbands have been in prison for six months. In the meantime, if eligible, they receive assistance through the Family Welfare Division. A mother with one child receives \$22.00 a week plus \$2.00 if she pays rent or board. For each additional child she receives \$3.50 a week. For each invalid child and each child under six years of age another \$2.00 is paid.

Unmarried mothers, deserted *de facto* wives, and the *de facto* wives of prisoners—irrespective of age—receive the same assistance. The difference is that this group is not taken over by the Commonwealth.

Where a mother receives a Commonwealth pension for herself and the children of her marriage but does not receive assistance for children not of her marriage, she is eligible to receive an allowance for each of the latter.

In the above cases the Commonwealth Government reimburses the State for half of the expenditure. The entire cost of assistance in the following cases is borne by the State:

1. When the bread-winner of a family with dependent children receives Commonwealth unemployment benefit, or workers compensation, supplementary assistance is provided. The amount depends on the size of the family, its income and commitments.
2. Where a child without sufficient means of support is being cared for by a person other than a parent, a \$6.50 a week family assistance payment is made.
3. Emergency grants, not exceeding \$30 per family in one year, can be made to those eligible for family assistance. These grants are primarily intended to provide food during the period between lodging an application for family assistance and the first payment.
4. All children for whom family assistance is being paid are eligible to receive medical, dental, pharmaceutical, and optical services free of cost

from the Health Department. An allowance is also made for school books up to a set scale determined by the Education Department. The cost of the secondary school books is borne by the Department of Social Welfare.

The following table gives details of family assistance rendered by the Family Welfare Division of the Social Welfare Department during the years 1966-67 to 1970-71 :

VICTORIA—FAMILY ASSISTANCE

Year	Number of applications		Number of children involved at end of period	Cost of assistance (a)
	Received	Approved		
1966-67	3,104	1,686	4,979	\$'000 572
1967-68	3,638	2,054	6,638	648
1968-69	3,795	2,291	6,489	829
1969-70(b)	4,724	3,162	7,337	1,081
1970-71(b)	5,555	3,643	4,911	2,062

(a) Excludes medical, dental, pharmaceutical, and optical benefits, and school book payments.

(b) From 2 April 1970 the family assistance system was altered and statistics from 1969-70 are not comparable with previous years.

The following table provides an analysis of families receiving assistance at 30 June 1971 :

VICTORIA—FAMILY ASSISTANCE : ANALYSIS OF FAMILIES RECEIVING ASSISTANCE AT 30 JUNE 1971

Type of case	Families receiving assistance	Children involved
Cases where the Commonwealth Government reimburses half of the expenditure—		
Deserted wives	409	1,025
Wives of prisoners	72	140
Single mothers	1,280	1,429
Deserted <i>de facto</i> wives	721	1,487
<i>De facto</i> wives of prisoners	39	84
Mothers with child (or children) not of marriage	46	73
	2,567	4,238
Cases not subject to reimbursement by Commonwealth Government—		
Supplementary assistance to parents—		
Fathers incapacitated	6	24
On unemployment benefits	67	194
Assistance to people who care for children whose parents—		
Are deceased	181	271
Have deserted the child	85	127
Are in gaol	24	57
	363	673
Total (a)	2,930	4,911

(a) During 1970-71 there were 1,582 cases of families receiving emergency grants to assist them during the period between lodging the application for assistance and the first payment.

The Division operates four reception centres for the initial reception of children newly admitted to its care. It also operates seven children's homes, each for about thirty children, and twenty-three family group homes, twelve each for eight children and eleven each for four children. The reception centres are for short-term care whilst the Division is planning for the children's future, whereas children's homes are for longer-term care.

Wards of the Ministry of Social Welfare are children and young persons placed under the legal guardianship of the Director-General to the exclusion of their parents. They may remain wards until they are eighteen years of age, and in exceptional cases even longer, but generally they are discharged earlier.

The control, supervision, and after-care of those who are admitted as wards before they reach their fifteenth birthday is the responsibility of the Family Welfare Division. Those who are older when they are admitted as wards become the responsibility of the Youth Welfare Division. Those in the first group are referred to as "children" and those in the second group as "young persons".

There are two ways by which a child, or young person, is made a ward of the Ministry. One is by an order from the Children's Court. It may be either because a police officer has successfully applied to the Court that the child be deemed in "need of care and protection", or because the child has committed an offence, or because a person who has the care and custody of the child has successfully applied to the Court that the child be deemed "uncontrollable". The other way is by application to the Director-General of Social Welfare. No grounds for the application are specified, but the Director-General must be satisfied that it is in the best interests of the child.

Apart from caring for wards in its own reception centres and children's homes, the Division arranges their placement in approved children's homes conducted by churches and other charitable agencies, with foster parents, in adoptive placements, and with relatives.

The Division pays private foster parents \$6.50 a week for the care of wards, and pays approved children's homes, of which there are about seventy, \$13.00 a week for the care of children younger than five years and \$9.50 for older children. In addition, medical, dental, and hospital services are available without charge, and allowances are made towards school books and school uniforms. It endeavours to recover from parents the cost of maintaining the wards, but usually it is possible to recover only a portion of this cost.

The following tables show details of wards of the State during the years 1969-70 and 1970-71:

DISCHARGES OF WARDS FROM FAMILY WELFARE DIVISION (a)

Type of discharge	1969-70			1970-71		
	Males	Females	Total	Males	Females	Total
Legal adoption	40	38	78	40	33	73
By direction of Director-General	394	287	681	362	245	607
Death	2	4	6	3	2	5
Time expired at 18 years	60	54	114	71	53	124
Discharged after time expired (b)	5	7	12	4	7	11
Court appeal	..	..	..	1	1	2
Total	501	390	891	481	341	822

(a) See also tables on young persons—that is, those fifteen years and over—made wards and admitted to and discharged from, the Youth Welfare Division.

(b) Time cannot be extended beyond the twenty-first birthday.

**VICTORIA—REASONS FOR CHILDREN BEING ADMITTED AS
WARDS OF STATE**

Reason for admission to Family Welfare Division	1969-70			1970-71		
	Males	Females	Total	Males	Females	Total
Children's Court orders—						
Care and protection application—						
Found wandering or abandoned	15	17	32	17	20	37
No means of support, or no settled place of abode	184	158	342	154	145	299
Not provided with proper food, etc., ill-treated, or exposed	72	83	155	76	66	142
Unfit guardianship	115	110	225	122	112	234
Lapsing or likely to lapse into a career of vice or crime	82	16	98	103	12	115
Exposed to moral danger	2	30	32	1	31	32
Truancy	13	7	20	15	7	22
Total	483	421	904	488	393	881
Offences—						
Assault	2	..	2	2	..	2
Sex—natural	..	..	..	1	..	1
Breaking	65	1	66	38	..	38
Larceny	27	..	27	44	2	46
Motor vehicles, larceny, etc.	7	..	7	8	..	8
Other offences	9	1	10	4	1	5
Total	110	2	112	97	3	100
Uncontrollable applications	32	9	41	23	7	30
Total made wards by Children's Court	625	432	1,057	608	403	1,011
By Director-General of Social Welfare	52	52	104	51	51	102
Total	677	484	1,161	659	454	1,113

The following table shows the location of wards placed with the Family Welfare Division at 30 June 1967 to 1971 :

**VICTORIA—LOCATION OF WARDS PLACED WITH THE FAMILY
WELFARE DIVISION**

Details	At 30 June—				
	1967	1968	1969	1970	1971
In Social Welfare Department institutions—					
Reception centres	257	270	306	363	347
Children's homes	138	176	178	169	206
Family group homes	88	95	93	101	137
Total	483	541	577	633	690
In approved children's homes	2,335	2,370	2,322	2,487	2,496
On home release with parents or relatives	1,600	1,693	1,847	1,794	1,842
In foster homes	656	626	609	608	634
Placed pending adoption	139	86	95	90	64
In Mental Health Authority institutions	166	178	166	172	165
Whereabouts unknown	13	8	11	12	8
Other	4	..	..	..	..
Total	5,396	5,502	5,627	5,796	5,899

Adoption service

When a parent or guardian signs a consent to adoption, he has the right to nominate either one of the twenty-one approved private adoption agencies or the Director-General to arrange the adoption. If no agency is nominated, or if a nominated agency declines to act, the adoption arrangements are made by the Director-General. The Director-General also arranges the adoption of wards who are available and suitable for adoption.

During the year ended 30 June 1971, 2,065 adoptions were legally finalised in Victoria. Of these, 312 were arranged by the Division—73 were wards and 239 non-wards. The Division also furnished reports to the Court in 380 cases where close relatives adopted children.

Other services

The Division, through the Infant Life Protection Provisions of the Children's Welfare Act, safeguards the welfare of children under five years of age who are placed for payment away from their parents.

The following is a statement of operations under these provisions for the years 1966-67 to 1970-71 :

VICTORIA—CHILDREN UNDER INFANT LIFE PROTECTION PROVISIONS

Particulars	1966-67	1967-68	1968-69	1969-70	1970-71
Children placed during year	318	247	403	518	404
Children discharged during year	350	257	376	540	434
Total children on placement at end of year	179	169	196	174	144

The Division also regulates street trading and employment of children under fifteen years in the entertainment field and is the legal guardian of children and young persons under twenty-one years who come from abroad without parents or relatives to live in Victoria. It maintains offices in many parts of the State and in the suburbs of Melbourne to make its services available locally to those in need of them. The regional offices are in Bairnsdale, Ballarat, Bendigo, Geelong, Hamilton, Mildura, Morwell, and Shepparton, and the suburban offices are in Dandenong, Footscray, Frankston, Glenroy, North Melbourne, Preston, and Ringwood. It is departmental policy to increase the number of regional and suburban offices as necessary.

Family Welfare Advisory Council

The Family Welfare Advisory Council is a body appointed by the Minister. Its twelve members, appointed for terms not exceeding three years, are predominantly representatives of family welfare and child welfare agencies. The functions of the Council are set out in the *Social Welfare Act 1970* as follows :

1. to advise the Minister on any alterations in practice and procedure considered desirable from time to time for the welfare, protection and care of children and young persons under the care of the Family Welfare Division ; and
2. to report on any matter of a like or allied nature referred to it by the Minister or on any matter on which it is authorised by this Act to report.

Youth Welfare Division

The Youth Welfare Division is administered by the Director of Youth Welfare. Its function is to promote the welfare of young people between

fifteen and twenty-one years of age. To fulfil this function the Division controls, treats, and provides after-care for young persons who are either made wards of the Department or are sentenced to detention in a Youth Training Centre; is involved in preventive work among juveniles; and assists the Youth Advisory Council in establishing and developing youth activities.

Remand facilities for young people on remand from the Children's Court—that is, for those who have committed an offence before they were seventeen years of age—are provided for boys in Turana at Royal Park, and for girls at the Winbirra Remand Centre which is adjacent to the Winlaton Youth Training Centre located at Nunawading.

Relatively few young persons in Victoria under seventeen years of age are remanded for trial. The average numbers held on remand are twenty boys and fifteen girls.

Notwithstanding that remand periods from the Children's Court nowadays tend to be less than one week, remand still represents a major crisis in the lives of the young persons concerned. The centres endeavour to be helpful during the hours of waiting, to reflect interest in their welfare, and to provide adequately for their physical well-being.

After sentence or after admission into guardianship the young person is designated a trainee and transferred to a classification centre for a short period of assessment pending a decision on placement. For males a classification centre has been established within the Turana complex at Royal Park and this is planned so that Children's Court trainees may be segregated from the adult court trainees. Females are accommodated in the Remand Centre at Nunawading for classification purposes pending the building of a classification wing.

The classification process is similar for males and females. It involves a teamwork approach comprising superintendents, social workers, psychiatrists, psychologists, education officers, medical officers, chaplains, and youth officers.

The reasons for discharge from and admission to the Youth Welfare Division are shown in the following tables:

VICTORIA—DISCHARGES OF WARDS FROM
YOUTH WELFARE DIVISION (a)

Type of discharge	1969-70			1970-71		
	Males	Females	Total	Males	Females	Total
By direction of Director-General	50	53	103	54	36	90
Court appeals	4	9	13	3	6	9
Death	1	..	1	2	1	3
Time expired at 18 years	325	189	514	287	153	440
Discharge after time extended beyond 18 years (b)	4	11	15	9	16	25
Total	384	262	646	355	212	567

(a) See also tables on children under fifteen years of age made wards and admitted to, and discharged from, the Family Welfare Division.

(b) Time cannot be extended beyond the twenty-first birthday.

VICTORIA—REASONS FOR YOUNG PERSONS BEING ADMITTED AS
WARDS OF STATE

Reason for admission to Youth Welfare Division	1969-70			1970-71		
	Males	Females	Total	Males	Females	Total
Children's Court orders—						
Care and protection application—						
Found wandering or abandoned	8	26	34	15	25	40
No means of support, or no settled place of abode	14	16	30	11	13	24
In a brothel, association with known thieves, etc.	..	1	1	..	..	..
Not provided with proper food, nursing, clothing, or medical aid	1	1	2	..	1	1
Unfit guardianship	1	4	5	1	6	7
Lapsing or likely to lapse into a career of vice or crime	86	27	113	91	22	113
Exposed to moral danger	1	87	88	1	100	101
Truancy	4	..	4	4	..	4
Total	115	162	277	123	167	290
Offences—						
Assault	3	..	3	3	..	3
Robbery	..	..	..	2	..	2
Sex offences	4	..	4	11	..	11
Breaking	39	1	40	64	8	72
Larceny	28	1	29	32	3	35
Motor vehicles, larceny, etc.	21	..	21	30	2	32
Other offences	5	..	5	19	1	20
Total	100	2	102	161	14	175
Uncontrollable applications	13	..	13	22	1	23
Total	228	164	392	306	182	488

The following tables show the offences for which sentences were imposed and the length of sentences during 1969-70 and 1970-71:

VICTORIA—OFFENCES FOR WHICH SENTENCES TO YOUTH TRAINING
CENTRES WERE IMPOSED

Offence	1969-70			1970-71		
	Males	Females	Total	Males	Females	Total
Homicide	2	..	2	2	..	2
Assault	49	..	49	74	2	76
Robbery	12	..	12	43	..	43
Sex offences	47	..	47	66	..	66
Breakings	894	8	902	852	31	883
Larceny	570	13	583	594	24	618
Motor vehicles, larceny, etc.	888	4	892	760	5	765
False pretences	33	..	33	46	..	46
Other offences	278	2	280	454	9	463
Total offences for which sentences imposed	2,773	27	2,800	2,891	71	2,962
Persons sentenced	655	11	666	870	20	890

VICTORIA—LENGTH OF SENTENCES TO YOUTH TRAINING CENTRES

Length of sentence	Number of sentences					
	1969-70			1970-71		
	Males	Females	Total	Males	Females	Total
Under 14 days	13	2	15	44	..	44
14 days and under 1 month	26	1	27	41	1	42
1 month and under 2 months	60	..	60	82	1	83
2 months and under 3 months	45	1	46	45	2	47
3 months and under 6 months	142	1	143	123	4	127
6 months and under 9 months	174	2	176	192	6	198
9 months and under 1 year	65	1	66	101	2	103
1 year and under 2 years	334	4	338	357	5	362
2 years and under 3 years	42	..	42	62	3	65
3 years	21	..	21	29	..	29
Total sentences	922	12	934	1,076	24	1,100
Persons sentenced	(a) 655	(a) 11	666	(b) 870	(b) 20	890

(a) Of the 655 males sentenced 541 were sentenced for the first time and of the 11 females sentenced 10 were sentenced for the first time.

(b) Of the 870 males sentenced 668 were sentenced for the first time and of the 20 females sentenced 18 were sentenced for the first time.

Youth Training Centres

In Victoria there are nine youth training centres—six for boys and three for girls. In these centres emphasis is placed on treatment rather than custody and security. There are only two maximum security units. One, Poplar House, is located within Turana and provides for twenty-six males; and the other, Goonya Section, is located within Winlaton and provides for a maximum of fifteen girls. Of about six hundred and fifty trainees in custody only an average of thirty-five are detained in what could be called maximum security, while the great majority are under minimal security conditions.

Youth training centres have educational courses, trade training, and general works activities. Some trainees attend school either at the centre or outside. Through service projects, and social and sporting activities, trainees are involved in the life of the community.

Turana Youth Training Centre treats mainly those boys unsuitable for the other centres, and those in need of specialised care such as psychiatric services. Two youth training centres—Malmsbury and Langi Kal Kal—are reserved for those sentenced by adult courts, while Morning Star (conducted by the Franciscan Order) and Bayswater (conducted by the Salvation Army) Training Centres are reserved for those sentenced by the children's courts.

The Sisters of the Good Shepherd conduct Youth Training Centres for girls in their Abbotsford and Oakleigh Convents. These centres take the majority of Catholic girls. All the other girls are placed in the Division's Winlaton Youth Training Centre.

Within each of the nine youth training centres the trend is towards dividing the institution into small treatment units thus allowing for diverse treatment programmes and a greater degree of individualised care.

One of the aims of the Divisions is the re-integration of the family. Special efforts are made to ensure visits by parents and relatives. After an initial period of eight weeks, male trainees receive weekend leave at intervals of six weeks and female trainees at intervals of one month. In addition, special leave is granted at Easter and Christmas.

All sentences to fixed terms of detention in Youth Training Centres are reviewed by the Youth Parole Board. The Board has the power to release a trainee on parole at any time—irrespective of the sentence.

Wards in the care of the Division are subject to regular review by the Review Committee which has wide powers of recommendation to the Director.

Youth Welfare Service

Victoria's first community treatment programme for young offenders began operating in April 1970 in premises at 614 Glenferrie Road, Hawthorn. It is called the Youth Welfare Service.

The Youth Welfare Service is restricted to male youths between fourteen and seventeen years of age. These youths must appear on police charges before a magistrate in the Children's Court. They must also have a history of not responding satisfactorily to case work probation and other non-institutional court sanctions such as fines or bonds of good behaviour, and, consequently, the alternative to the Youth Welfare Service would, as a rule, be a sentence to detention in a youth training centre. Those youths whom the magistrate regards as potentially responsive to the treatment provided by the Service have their cases adjourned for twenty-one days. This allows for an assessment by the Youth Welfare Service.

To prove suitable a youth must be of at least average intelligence to understand the treatment programme; he must live at home or with close relatives who are willing to respond to advice from the Welfare Service; and he must have committed offence(s) primarily as a result of his allegiance to friends or the gang of which he is a member.

Those who satisfy the Youth Welfare Service selection criteria are then placed by the magistrate on probation for a period of six months. The main condition of the Probation Order is that the probationer shall report to the Youth Welfare Service and carry out all instructions given by the Service.

The present facilities at Hawthorn allow thirty youths to attend the Centre at one time. To develop proper group interaction ten youths are admitted each month and they then form a group. This group replaces another group of ten who have just completed a three months programme. The programme of the new group runs independently from that of the other two groups which are at the Centre at the same time.

The youths are required to attend the Centre three evenings during the week, starting from 5.30 p.m., and on Saturdays from 9 a.m. On each of the four days they leave the Centre at 9 p.m. and must be home not later than 10 p.m. While at the Centre they are involved in projects of value to the community. They repair kindergarten furniture, make toys for children in institutions, and so on. On Saturdays they work on outside projects such as construction work for the National Parks Authority, renovation and painting work for welfare organisations, or chopping and stacking wood for the aged.

However, the focal point of the programme is the group discussion known as "guided group interaction" which takes place four times a week and lasts for about one hour. In these discussions a trained therapist has the task of generating positive peer group pressures to counter the negative pressures that were the cause of the youths being in trouble with the law. The programme is based on the premise that, since group pressure can cause a youth to commit an offence it can also—with the help of skilled guidance—bring about a law-abiding pattern of behaviour.

An important feature of the programme is the involvement of parents or, in the absence of parents, of close relatives. The superintendent and staff maintain close contact with the youths' families. Family problems that are revealed in the group discussions, and are regarded as being relevant to a youth's anti-social behaviour, are followed up with the family if the youth assents.

On completion of the three months programme at the Centre a detailed report is forwarded to the Children's Court. This is for the information of the Magistrate and does not imply that the youth is required to appear again before the court. For the remaining part of the probation period arrangements are made for the youth to report back to the Service at regular intervals for individual counselling.

Due to limited facilities, the Youth Welfare Service is at present restricted to male youths between fourteen and seventeen years of age who appear to commit offences because they are members of a group and conform to group activities. However, the treatment can be extended to cater for girls and young women, and there is no reason why selected adults could not benefit from similar treatment. The programme could also be structured to help non-group offenders.

Wards after-care

At 30 June 1971 the Division was responsible for 1,175 wards not under sentence. Most were made wards by Children's Court orders, but about 200 a year are transferred from the Family Welfare Division. They are wards who have reached the end of their compulsory education and are entering employment. All wards remain under guardianship of the Director-General until their eighteenth birthday, unless they are released earlier by direction of the Director-General, or their time is extended as far as their twenty-first birthday if circumstances warrant it.

Of the 1,175 wards 209 were retained for treatment in the Youth Training Centres, while the greatest number (906) were placed either on home release or were residing with their employer, in youth hostels, or in private board. This group is under the after-care supervision of the Division. A team of social workers gives them guidance and support.

The youth hostel scheme is a combined effort by government and private agencies. It plays an essential part in the rehabilitation of youths who have been made the responsibility of this Division. Hostels can be divided into three types. The first type cares for the homeless and dependent young persons, the second type is for those who are in conflict with the law and who have some underlying emotional disturbance, while the third type takes in intellectually retarded youths. The Government subsidises the private

hostels. The Division controls three hostels which care for the more difficult ex-institutional wards.

The table on page 543 shows the location of all the young persons, wards, and trainees who were under the supervision of the Youth Welfare Division at 30 June 1970 and 1971.

Youth Advisory Council

The Youth Advisory Council has nine members appointed by the Minister for a term of three years. They are persons who have had experience either in youth training and management or in the conduct of some youth organisation. The Director of Youth Welfare is a member of the Council and the Division provides the services of a full-time secretary, a trained advisor, a stenographer, administrative offices, and a meeting room.

The functions of the Council are set out in the *Social Welfare Act 1970* as follows :

1. to recommend to the Minister measures for the promotion, establishment, and assistance of youth clubs and organisations and for the furtherance of the moral, intellectual, and physical welfare and development of youth ;
2. to recommend to the Minister the making of payments out of the Youth Organisations Assistance Fund for or towards the establishment, maintenance, and assistance of youth clubs and organisations and other bodies concerned with the welfare of youth and in particular for or towards the training of youth leaders for such bodies, organisations, or clubs ; and
3. generally to promote, assist, and co-ordinate the activities of such bodies, organisations, and clubs and other activities which the Council considers to be for the welfare of youth.

Since the establishment of the Youth Organisation Assistance Fund in 1956-57, \$3,390,000 has been allocated by the Treasury for distribution on the Council's recommendation. The annual allotment in 1970-71 was \$300,000. Grants are made to a wide range of youth groups and organisations to assist them in the erection of buildings, supply of equipment, maintenance of their premises, youth leadership training, and establishment and conduct of camps. Parent organisations, individual clubs, and all kinds of youth groups use the advisory services of the Council.

Prisons Division

This Division is administered by the Director of Prisons. It is responsible for the custody of all persons in prisons and is required to assist in the rehabilitation of prisoners and their subsequent readjustment in the community. The Prisons Division maintains twelve prisons for males and one prison for females.

Pentridge, the main central prison, holds about half of all the prisoners in Victoria, and is the site of the Classification Centre. Prisoners serving sentences of at least one year (or of at least six months if they are under twenty-one years of age) and those who are eligible for parole, after having been put through a selection and testing procedure, appear before the Classification Committee which endeavours to place them in the most appropriate institution to assist their rehabilitation.

Pentridge has nine divisions—each accommodating a different type of prisoner. One division is for trial and remand cases, the second is for short-term and vagrant prisoners, the third is a psychiatric and medical

clinic. In what is known as Pentridge proper there are four divisions for longer-term prisoners, one being for youths under twenty-one years of age and, finally, there is one division with accommodation for thirty-nine holding prisoners who are either regarded as security risks or who have been sent from other divisions or prisons for disciplinary purposes. Pentridge also has an industrial complex. There are fourteen kinds of industries producing goods valued at over \$250,000 annually.

In the training prisons technical instruction is provided in a number of industries. The Dhurringile Rehabilitation Centre is intended for alcoholics and provides employment in the farm and orchard. McLeod Prison Farm on French Island concentrates on general farming. At Cooriemungle the prisoners undertake farming, large-scale land clearing, and timber-milling. Prisoners in the reforestation prisons at Morwell River and Won Wron are engaged in forestry work. At Ararat there is forestry work, mat-making, and tubular steel furniture manufacture. Sale Prison is a local reception prison where prisoners are occupied in forestry work, mat-making, or gardening. Castlemaine Prison is used as a semi-hospital prison. It has a large vegetable garden and a mat-making industry. At Fairlea—Victoria's only female prison—instruction is given in arts and crafts, domestic economy, sewing, and by volunteer instructors in academic work.

In all the prisons correspondence courses are encouraged and facilitated. The Education Department provides teachers for six registered schools within prisons. The main one is at Pentridge with five teachers; the other schools are at Ararat, Beechworth, Bendigo, Geelong, and McLeod. They provide general education up to the Higher School Certificate level.

In their leisure hours prisoners can pursue hobbies, watch television, or play sports. There are opportunities to take part in cultural activities.

Prisoners earn up to 50 cents a day. They are allowed to spend about \$1 a week on cigarettes, chocolate, hobby materials, and so on. The rest is saved and handed to them when they leave prison. Each convicted prisoner is allowed two visits each month but the governor may grant extra visits. Temporary leave may be given by the Director-General when appropriate. Often prisoners are allowed out unescorted. Chaplains are nominated by the major denominations and appointed by the Government to the various prisons, either on a full-time or a part-time basis. Voluntary organisations also assist prisoners.

Where a minimum term is set by the court the Parole Board has the power to release the prisoner on parole at any time after the minimum term has expired. The prisoner may earn up to three days remission for good behaviour for each month served, which is deducted from the minimum term. Where no minimum term is set by the court the prisoner may earn remission for good conduct amounting to one quarter of his sentence. Moreover, all prisoners may be granted an additional three days special merit remission for each month served on grounds of special application to the task allotted to them. On the other hand, the governor of a prison may postpone discharge or release on parole by up to seven days for each breach of prison regulations.

The following table shows the offences for which prisoners were sentenced in Victoria during 1970–71 :

VICTORIA—OFFENCES FOR WHICH PRISONERS WERE SENTENCED,
1970-71 (a)

Offence	Males	Females	Total	Percentage
Homicide	37	4	41	0.2
Assault	949	25	974	5.7
Robbery with violence	109	1	110	0.7
Sex—Natural	290	118	408	2.4
Unnatural	106	..	106	0.6
Breakings	1,939	10	1,949	11.4
Larceny	2,405	99	2,504	14.6
Motor vehicle, larceny, etc.	872	18	890	5.2
False pretences	1,104	240	1,344	7.9
Drunk and disorderly	3,024	110	3,134	18.3
Vagrancy	531	64	595	3.5
Indecent, riotous, and offensive or insulting behaviour	577	35	612	3.6
Breach of bond or probation	116	7	123	0.7
Breach of parole	47	1	48	0.3
Other	4,178	87	4,265	24.9
Total offences	16,284	819	17,103	100.0
Convicted persons received	5,502	391	5,893	

(a) Many individuals are convicted for more than one offence and are received in prison more than once during a year.

VICTORIA—PRISON ACCOMMODATION AND PRISONERS
(Exclusive of police lock-ups)

Institution	Accommodation available at 30 June—		Prisoners			
			Daily average		In custody at 30 June—	
	1970	1971	1969-70	1970-71	1970(a)	1971(b)
Pentridge Prison	1,420	1,387	1,175	1,254	1,194	1,239
Ararat Prison	200	200	180	184	171	188
Beechworth Training Prison	115	115	101	101	96	101
Bendigo Training Prison	120	120	114	114	115	119
Castlemaine Prison	112	112	90	90	88	105
Coorlemungle Prison	60	60	52	54	51	51
Dhurringile Rehabilitation Centre	75	75	66	68	65	64
Geelong Training Prison	130	130	134	136	145	129
McLeod Prison Farm (French Island)	127	127	128	121	131	117
Morwell River Reforestation Prison	80	80	67	70	71	66
Sale Prison	75	75	61	73	76	64
Won Wron Reforestation Prison	85	85	68	73	69	69
Total males	2,599	2,566	2,236	2,338	2,272	2,312
Fairlea Female Prison	70	100	47	51	55	44
Total	2,669	2,666	2,283	2,389	2,327	2,356

(a) Including 134 males and 15 females awaiting trial.

(b) Including 79 males and 1 female awaiting trial.

The number of prisoners received at and discharged from gaols (excluding police lock-ups) in Victoria is given in the following table for the years 1966-67 to 1970-71 :

VICTORIA—PRISONERS RECEIVED AT AND DISCHARGED FROM GAOLS
(Exclusive of police lock-ups)

Particulars	1966-67	1967-68	1968-69	1969-70	1970-71
Number in confinement at beginning of period—					
Convicted	1,872	1,994	2,103	2,199	2,178
Awaiting trial	122	141	179	131	149
Total	1,994	2,135	2,282	2,330	2,327
Received during period—					
Convicted of felony, misdemeanour, etc.	8,209	8,889	8,745	8,003	8,474
Transfer from—					
Other gaols and youth training centres	1,811	2,303	2,462	2,261	2,741
Hospitals, asylums, etc.	120	143	159	155	176
For trial, not subsequently returned to prison	3,282	3,268	3,290	3,327	3,351
On parole board warrants	..	39	42	57	45
Awaiting deportation by Commonwealth Immigration Department	16	16	16	27	17
Returned on order	357	376	371	331	450
Total	13,795	15,034	15,085	14,161	15,254
Discharged during period	13,654	14,887	15,037	14,164	15,225
Number in confinement at end of period—					
Convicted	1,994	2,103	2,199	2,178	2,276
Awaiting trial	141	179	131	149	80
Total	2,135	2,282	2,330	2,327	2,356

Probation and Parole Division

This Division is administered by the Director of Probation and Parole. It supervises and provides case work services for persons released on probation from Victorian courts; assists in the rehabilitation into the community of persons released on parole from youth training centres or prisons; and provides, when requested by a court, reports and information on any person who has been found guilty—whether convicted or not.

To fulfil its functions the Division is divided into four sections: Adult Probation and Parole (Male) Section, Probation and Parole (Female) Section, Youth Parole (Male) Section, and Children's Court Probation (Male) Section.

The officers of the Adult Probation and Parole (Male) Section are responsible for the supervision of all males admitted to probation from adult courts—that is, of those who have committed the offence after their seventeenth birthday, and of all males paroled by the Adult Parole Board. They are also responsible for submitting pre-sentence reports to adult courts and various types of reports to the Adult Parole Board. The latter include reports on all persons being detained at the Governor's pleasure.

The officers of the Probation and Parole (Female) Section supervise all female probation and parole cases irrespective of age. They also prepare reports on females for courts or parole boards.

The officers of the Youth Parole (Male) Section are responsible for the supervision of male trainees paroled from a youth training centre—that is, of young persons who were between their fifteenth and twenty-first birthday at the time of the offence. They prepare case histories and other reports for the Youth Parole Boards.

The Children's Court Probation (Male) Section is located in the Children's Court Building, Batman Avenue, Melbourne. The officers of this Section supervise all male offenders placed on probation by Children's Courts—that is, those who have committed the offence before their seventeenth birthday. They provide reports on most children and young persons who are required to appear before the Children's Court.

While officers of each Section serve their own particular range of clients, they are not excluded from supervising persons not falling into their particular category. For instance, Children's Court probation officers can supervise any adult male parolee or probationer, or a youth parolee.

In addition to the above-mentioned locations, probation and parole officers are located in various regional and suburban offices.

The Division employs the services of male and female stipendiary and honorary officers. All stipendiary probation and parole officers are required to be qualified social workers, while some 800 honorary probation officers are selected citizens who supervise less difficult cases (usually first offenders) who live in their neighbourhood. Honorary probation officers discuss problems and treatment methods with stipendiary officers and are encouraged to attend a course of training at the Institute of Social Welfare.

Probation

Probation in Victoria is an alternative to custodial care. When an offender is admitted to probation—which may be for a period of between one and five years—he consents to comply with certain conditions: to abstain from violation of the law, to report to the Chief Probation Officer within forty-eight hours, to carry out the lawful instructions of the Probation Officer, to report and receive visits as directed by the Probation Officer, and to notify the Probation Officer within forty-eight hours of any change of address or change of employment during the period of probation. Special conditions may be added by the court requiring abstinence from liquor, attendance at a medical or psychiatric clinic, avoidance of specified company or place, and so on.

The probation order states that the probationer will be "supervised" by a probation officer and it is the first responsibility of the officer to see that the conditions of the order are adhered to. At the same time, however, every attempt is made to assist the offender in developing his personal relationships and abilities to be able to live constructively within the framework of society. Contact between the probationer and the probation officer varies in intensity. Initially it tends to be more frequent and then gradually decreases. It depends on the seriousness of the offence committed, the individual's adjustment and progress, and the length of the probation period.

A breach of the conditions of probation is reported by the supervising probation officer to the Chief Probation Officer who decides whether any action to instigate breach proceedings will be taken. Court action may result in adjournment, fine, bond, admission to a new period of probation,

or sentence to detention in either youth training centres or prisons. On the other hand, the court may also decide to take no action.

The following tables provide information on various aspects of probation:

VICTORIA—PERSONS ON PROBATION

Year	Placed on probation during year		Children on probation at end of year	Adults on probation at end of year
	By Children's Courts	By adult courts		
1966-67	1,748	1,522	2,022	3,029
1967-68	2,047	1,533	2,499	2,693
1968-69	2,148	1,381	2,735	2,263
1969-70	2,375	1,514	3,049	2,153
1970-71	2,865	1,458	3,536	2,181

VICTORIA—AGES OF PERSONS PLACED ON PROBATION

Age of probationers	1969-70			1970-71		
	Males	Females	Total	Males	Females	Total
By Children's Courts—						
Under 8 years	8	24	32	14	46	60
8 years and under 9 years	9	..	9	21	5	26
9 years and under 10 years	20	2	22	24	2	26
10 years and under 11 years	43	5	48	57	10	67
11 years and under 12 years	57	12	69	72	8	80
12 years and under 13 years	121	34	155	147	36	183
13 years and under 14 years	211	78	289	239	82	321
14 years and under 15 years	405	121	526	464	181	645
15 years and under 16 years	419	145	564	484	183	667
16 years and under 17 years	454	109	563	548	151	699
17 years and over (a)	88	10	98	82	9	91
Total	1,835	540	2,375	2,152	713	2,865
By adult courts—						
17 years and under 21 years	829	87	916	685	99	784
21 years and under 25 years	231	21	252	234	21	255
25 years and under 30 years	111	16	127	185	14	199
30 years and under 35 years	50	6	56	73	7	80
35 years and under 40 years	31	11	42	37	8	45
40 years and over	53	11	64	52	6	58
Not known	45	12	57	17	20	37
Total	1,350	164	1,514	1,283	175	1,458
Total probationers	3,185	704	3,889	3,435	888	4,323

(a) Those 17 years and over admitted to probation by Children's Courts committed the offence before their seventeenth birthday.

VICTORIA—PERSONS ON PROBATION

Particulars	On Children's Courts probation orders			On adult courts probation orders			Total
	Males	Females	Total	Males	Females	Total	
1969-70							
On probation at beginning of year	2,129	606	2,735	1,936	327	2,263	4,998
Placed on probation during year	1,835	540	2,375	1,350	164	1,514	3,889
Completed probation during year	1,564	372	1,936	1,118	110	1,228	3,164
Probation cancelled due to—							
Further conviction	9	68	77	313	17	330	407
Breach of other conditions	27	21	48	62	4	66	114
On probation at end of year	2,364	685	3,049	1,793	360	2,153	5,202
1970-71							
On probation at beginning of year	2,364	685	3,049	1,793	360	2,153	5,202
Placed on probation during year	2,152	713	2,865	1,283	175	1,458	4,323
Completed probation during year	1,683	451	2,134	1,076	146	1,222	3,356
Probation cancelled due to—							
Further conviction	118	63	181	181	7	188	369
Breach of other conditions	50	13	63	17	3	20	83
On probation at end of year	2,665	871	3,536	1,802	379	2,181	5,717

Parole

In Victoria there are two Youth Parole Boards and two Adult Parole Boards. They have power to release on parole those who have been sentenced to detention but are eligible to be released on parole before the full sentence is served. The Youth Parole Boards can release on parole young persons sentenced to detention in a youth training centre at any time during the currency of the sentence, while the Adult Parole Boards are required to consider every adult case in which what is known as a "minimum term" prison sentence is set by the court.

When a Parole Board considers a case its main concern is whether the person is a good risk on parole. It bases its decision on the report it receives from the parole service and the prison authorities. Medical and psychological reports are also submitted when necessary. The person's criminal history is a major consideration. The Board can either grant parole, defer consideration to a later date, or deny parole.

Youth Parole Boards consider each case soon after the admission of the young person to a youth training centre, and generally set a review date. Those trainees who are sentenced to detention for six months or less are, as a rule, not regarded as suitable for parole. The earliest date an Adult Parole Board can release a prisoner on parole depends not only on the minimum term set by the court but also on the remissions the prisoner has earned while in prison for good conduct and for special application to the task allotted to him. On the other hand, release may be postponed either because the governor of the prison, or a visiting justice, has imposed punishment following a breach of prison regulations or because the prisoner is required to serve time in lieu of unpaid fines.

By and large parole procedures are similar to probation procedures. On the day of release the parolee is handed a Parole Order which contains conditions similar to those on Probation Orders. The Parole Officer helps the parolee to carry out these conditions and also assists with some of his problems such as finding employment.

If the parolee is sentenced to another term of imprisonment his parole is automatically cancelled. In addition the Boards can cancel parole at any time should the parolee breach a condition or should his behaviour be unsatisfactory. However, most parolees complete parole successfully. The date of completion is when the full sentence set by the court expires.

VICTORIA—ANALYSIS OF PERSONS ON PAROLE

Particulars	Youth parole			Adult parole			Total
	Males	Females	Total	Males	Females	Total	
1969-70							
On parole at beginning of year	176	1	177	652	18	670	847
Released on parole during year	358	7	365	688	16	704	1,069
Completed parole during year	252	2	254	405	8	413	667
Parole cancelled due to—							
Further conviction	80	..	80	119	1	120	200
Breach of other conditions	20	1	21	92	1	93	114
On parole at end of year	182	5	187	724	24	748	935
1970-71							
On parole at beginning of year	182	5	187	724	24	748	935
Released on parole during year	413	3	416	661	11	672	1,088
Completed parole during year	268	7	275	420	13	433	708
Parole cancelled due to—							
Further conviction	86	..	86	155	..	155	241
Breach of other conditions	17	..	17	60	2	62	79
On parole at end of year	224	1	225	750	20	770	995

The probation service prepares "pre-court" reports in the case of Children's Courts and, when requested, "pre-sentence" reports in the case of adult courts. The following table gives the number of pre-sentence reports required by the various adult courts during the years 1966-67 to 1970-71 :

VICTORIA—ADULT PRE-SENTENCE REPORTS

Year	Supreme Court		County Court		Magistrates' Courts		Total
	Males	Females	Males	Females	Males	Females	
1966-67	11	..	140	4	305	41	501
1967-68	14	..	138	4	260	29	445
1968-69	4	2	101	5	298	37	447
1969-70	12	..	155	9	267	28	471
1970-71	7	..	121	1	259	29	417

The parole service prepares reports for the Youth Parole Boards on most youths admitted to youth training centres. In the case of adult prisoners eligible for parole, a parole officer interviews the prisoner about three to four weeks before the date on which he will be eligible. He investigates the prisoner's background, prospects for work and lodging, and other matters. In the case of female prisoners, of whom there are relatively few, relatives and friends are nearly always interviewed. A report is then submitted to the Adult Parole Board.

The following table shows the location of young persons under the control of the Youth Welfare Division at 30 June 1970 and at 30 June 1971 :

**VICTORIA—LOCATION OF YOUNG PERSONS UNDER THE CONTROL OF
THE YOUTH WELFARE DIVISION**

Location	Wards not under sentence		Young persons under sentence			
			Wards		Non-wards	
	Males	Females	Males	Females	Males	Females
AT 30 JUNE 1970						
Youth training centres—						
Government	126	76	6	1	258	2
Non-government	4	30	34	..	49	..
On home release	316	118	..	..	..	..
Residing with employer, in hostel, or in private board	250	151	..	..	..	..
On parole	..	..	(a) 18	..	164	5
In prison (b)	8	..	..	..	4	..
Other institutions	28	1	..	..	..	..
Escapes	38	44	..	..	10	1
Appeal bail	..	..	..	..	3	..
Total	770	420	58	1	488	8
AT 30 JUNE 1971						
Youth training centres—						
Government	120	66	66	2	285	5
Non-government	..	23	38	..	51	..
On home release	361	140	..	..	..	..
Residing with employer, in hostel, or in private board	233	172	..	..	..	..
On parole	..	..	(a) 38	1	186	..
In prison (b)	..	..	14	1	7	..
Other institutions	8	3	..	..	6	..
Escapes	30	19	..	..	14	..
Appeal bail	..	..	14	9	3	..
Total	752	423	170	13	552	5

(a) Wards on parole, although under the control of the Youth Parole Board, are still under the legal guardianship of the Director-General of Social Welfare.

(b) Wards and youth trainees in prison are either on remand or serving short term sentences.

Training Division, Institute of Social Welfare

This Division—located at 12 Lisson Grove, Hawthorn—is administered by the Director of Training. Its main function is to provide training courses covering the major aspects of welfare work undertaken by government and non-government agencies.

In addition, the Division is responsible for the educational and trade training programmes in all Social Welfare Department institutions. It administers tests to determine the suitability for training of those sentenced to detention in a youth training centre or prison, and is represented on their respective classification committees. It is the liaison authority between the Department and the Education Department, which provides teachers for school programmes within the various institutions and arranges technical correspondence courses for inmates in the government and non-government institutions. It also supervises Social Studies Cadets of the Department of Social Welfare who attend the University of Melbourne. Finally, it selects male junior staff for departmental institutions.

Social Welfare Training Council

The Social Welfare Training Council has twelve members who include the Director of Training and also the Directors of the Family Welfare, Youth Welfare, and Prisons Divisions. The other members are appointed by the Minister for terms not exceeding three years. The functions of the Council are set out in the *Social Welfare Act 1970* as follows :

1. to exercise a general supervision over theoretical and practical training prescribed by the Council ;
2. to prescribe courses of instruction and training in social welfare ;
3. to conduct written practical and oral examinations ;
4. to issue certificates of qualification to persons who have passed examinations at the prescribed standards of proficiency ; and
5. to maintain a register of persons who have passed examinations at the prescribed standards of proficiency.

Training courses

Tuition for all courses at the Institute of Social Welfare is free. Each year the State Government makes available six bursaries for the Youth Leadership Diploma Course and six for the full-time Child Care Workers Course. The value of these bursaries is \$1,000 and students are not required to enter into an agreement to work for the State Government after graduating. It is also possible for students on the Youth Leadership Diploma Course to obtain a Commonwealth Technical Scholarship. For full-time study the scholarship amounts to a \$200 living allowance, and a \$50 text book and equipment allowance.

Courses offered by the Institute include the following:

(a) Child Care Workers Course

This course provides basic training for persons employed or interested in being employed in the residential care of children separated from their parents. Applicants must be at least eighteen years of age and should have attained Form 2 standard or its equivalent.

(b) Youth Workers Course

This course is designed to train persons employed or interested in employment in the care of young people who are committed to youth training centres. The qualifications required are the same as those for the Child Care Workers Course.

(c) Prison Officers Course

Part I provides training for newly recruited prison officers before they take up their position in prison. It involves twelve weeks theoretical and twelve weeks practical training. Part II and Part III are conducted by correspondence. Part II is required for promotion to Senior Prison Officer, and Part III is required for promotion to Chief Prison Officer and all higher prison positions.

(d) Youth Leadership Diploma Course

This is a three year full-time course designed to train adult men and women to work with young people. Applicants must be eighteen years of age and have attained Leaving Certificate standard or its equivalent. Preference is given to applicants who have an additional year of study or some work experience.

(e) Welfare Officers Course

This course provides training, as well as an opportunity for discussion, people who have special problems. Students learn about the structure of society, and the various methods of helping people and the community resources available for the purpose. They also gain skills in interviewing. This course is not an alternative to the university course for social workers. It is expected that welfare officers will work in welfare organisations and hospitals under the direction of social workers or in conjunction with a committee. Applicants must have four Leaving subjects, including English.

(f) Honorary Probation Officers Course

This course provides training, as well as an opportunity for discussion, for honorary probation officers and those who intend to volunteer for probation work. The course involves two evenings a week for a period of ten weeks.

(g) Supervisors Course

This course is for those who have the task of supervising students from this Institute while they are on practical work placements.

(h) Adoption Workers Course

This course is for staff from adoption agencies. They gain an understanding of the *Adoption of Children Act 1964* and have an opportunity to discuss the various aspects of adoption work. One aim of this course is to encourage uniform standards of work in adoption agencies.

Research and Statistics Division

This Division is administered by the Director of Research and Statistics and conducts research into social welfare problems. It co-operates in non-governmental research projects and supervises any investigations made in relation to such projects within the departmental organisation or institutions. It also supervises the preparation of statistics for all Divisions, the collation of all material for issue from the Department, and the dissemination of information to the public with regard to social welfare.

Finance

The following table shows the financial operations of the Social Welfare Department from 1966-67 to 1970-71 :

VICTORIA—MINISTRY OF SOCIAL WELFARE:
REVENUE AND EXPENDITURE
(\$'000)

Particulars	1966-67	1967-68	1968-69	1969-70	1970-71
Revenue—					
Sale of goods produced in—					
Prisons	276	408	333	358	419
Youth training centres	34	24	21	27	25
Child endowment	62	39	25	64	74
Maintenance collection	96	79	79	82	96
Quarters, rations, and rents	48	34	58	68	73
Other revenue	8	25	23	16	17
Total revenue	524	609	540	615	704

VICTORIA—SOCIAL WELFARE DEPARTMENT: REVENUE AND EXPENDITURE—*continued*
(\$'000)

Particulars	1966-67	1967-68	1968-69	1969-70	1970-71
Expenditure—					
Central Administration and Research and Statistics Division—					
Salaries and general expenses	230	276	286	358	446
Family Welfare Division—					
Salaries and general expenses	409	457	475	565	646
Maintenance of reception centres and departmental children's homes	990	1,107	1,277	1,542	1,869
Payments for wards in—					
Approved children's homes	1,112	1,208	1,286	1,316	1,443
Foster homes	224	274	297	286	322
Family assistance	572	649	829	1,081	2,062
Other expenditure	37	36	50	46	57
Youth Welfare Division—					
Salaries and general expenses	115	127	150	177	214
Maintenance of remand and departmental youth training centres	1,168	1,306	1,453	1,660	1,882
Payments to non-departmental youth training centres	207	218	197	207	202
Other expenditure	114	117	130	133	142
Grants to youth organisations	286	291	304	310	303
Prisons Division—					
Salaries and general expenses	2,842	3,157	3,463	3,884	4,239
Probation and Parole Division—					
Salaries and general expenses	273	298	340	398	462
Parole boards' expenses	8	9	8	9	9
Training Division—					
Salaries and general expenses	96	115	124	159	169
Total expenditure	8,684	9,645	10,670	12,131	14,467
Net expenditure	8,160	9,036	10,130	11,516	13,763

Voluntary services for the mentally handicapped

There is a wide range of voluntary services for the mentally handicapped in Victoria, details of which are listed in this article.

Mental health (formerly hospitals) auxiliaries

On 23 June 1932 a public meeting sponsored jointly by two organisations, the Society for the Welfare of the Mentally Afflicted and the Victorian Council for Mental Hygiene (formed in 1930), suggested the idea of a lay auxiliary for patients in Melbourne metropolitan mental hospitals. There was little community interest in the mentally handicapped, and conditions for mental patients in hospitals were at a low ebb during the depression years. Several ladies were willing to form a lay auxiliary. The first Central Council of the Mental Hospital Auxiliaries was established in 1935. By 1937, ten auxiliary branches had been formed: Ivanhoe-Heidelberg, Riversdale, Kew, Sunbury, Pleasant Creek-Stawell, Kew Cottages, City (ex-nurses), Wangaratta, Mont Park, and Ballarat. Moneys were raised to provide extra amenities for patients in mental hospitals, such as refrigerators, film projectors, sterilisers, bedsocks, knee rugs, outings, and newspapers. A display and sale of patients' handwork was held annually for many years in the Melbourne Town Hall. During the Second World War profits

from the exhibition went to the Red Cross Society and the Comforts Fund.

Kiosks

In 1936 the Mental Hospital Auxiliaries established a kiosk for patients at Mont Park Hospital and by 1968 eleven kiosks with volunteer helpers were operating at Mont Park, Kew, Plenty, Beechworth, Sunbury, Ararat, Ballarat, Traralgon, and Larundel Hospitals, as well as at the Janefield and Kew Cottages Training Centres.

Hostels

Some of the kiosk profits were set aside for an after-care hostel and this became a possibility following two donations of \$10,000 and \$1,000 for the hostel and equipment, respectively. Kinkora Hostel in Hawthorn was purchased and opened for eleven women rehabilitees from mental hospitals. A trained psychiatric nurse was engaged as matron.

The Mental Hygiene Branch purchased another property, Trelo-warren, in 1947 as a rehabilitation hostel for men, with three beds set aside for ex-servicemen at the request of the Returned Services League. The running of this hostel and payment of staff also was undertaken by the Mental Hospital Auxiliaries. In 1960 the Auxiliaries purchased another property in Armadale, Wynnstay House, for longer term rehabilitation beds for men. Inmates who reside at Kinkora or Trelo-warren are limited to 6 weeks free of charge, but those at Wynnstay House are expected to work and pay board. The Mental Hygiene Branch now subsidises these three hostels at the rate of \$14.50 for board for each person in residence. Staff salaries at all three hostels are paid by the auxiliaries, which changed their name from Mental Hospital Auxiliaries to Mental Health Auxiliaries when the last of these hostels opened.

Visiting service auxiliaries

By 1961 experience from America had shown that volunteers worked successfully in wards of mental hospitals, stimulating and making friends with the patients. As it was felt many people in the community could give time but not money to community effort, it was decided, with the Mental Hygiene Department's approval, to form a group of volunteers who would give service in hospitals. That same year, the first Visiting Service Auxiliary was formed by Mrs Pardy, M.B.E., who had been a pioneer in this work since 1935 at Kew Mental Hospital. These volunteers received a form of training from staff and helped by talking to patients, taking them for walks, on shopping excursions, and participating with them in social activities.

There are now thirteen visiting service auxiliaries at the Mont Park, Plenty, Larundel, Willsmere (Kew), and Sunbury Hospitals, the Kew Cottages and Janefield Training Centres, the Ernest Jones and Malvern Clinics, and the Glenhuntly Rehabilitation Centre, and three groups who work in the community at Essendon, Moorabbin, and Geelong not attached to any institution. The latter drive patients to appointments and help mothers with retarded children on waiting lists for residential care. There are 680 Visiting Service Auxiliary members.

Lakeside Hospital, Ballarat has a small independent group of thirty

volunteers, whose work is similar to that of the Visiting Service Auxiliary—the helpers are called Psychiatric Community Volunteers.

Since 1937 the number of auxiliary branches has grown to twenty, and they continue to raise funds to provide amenities for patients in hospitals. Those functioning at present are: Christ Church (Mitcham), Ferntree Gully, Glenhuntly, Hawthorn-Kew, Hobson Park (Traralgon), Janet Bowen Day Centre, Lakeside (Ballarat), Sandhurst (Bendigo), Malvern-Caulfield, Ringwood, St Nicholas Hospital, The Services, City Branch, Riversdale, Pleasant Creek (Stawell), Yarra, Wangaratta, Sunbury, Savoy, and Kew Cottages. The total membership of these auxiliaries is 386.

Australian Association of Relatives and Friends of the Mentally Ill

This organisation was formed in 1945, and in 1970 had 100 members. They advocate pensions for patients in mental hospitals and provide gifts, outings, and parties for hospital patients. The founder (Mrs Gilbert), when she died in 1969, bequeathed a property in East Melbourne to the Mental Hygiene Branch for an after-care hostel. This property was recently sold for \$78,250 and the funds were used to purchase a larger unit in Preston conveniently situated close to an existing hostel, thus enabling some facilities to be shared.

Red Cross Society, Victorian Division

The Director of Red Cross Hospital Visiting provides libraries at ten psychiatric and mental hospitals, music libraries at three hospitals, and percussion groups and music discussion groups at five centres of the Branch. These services are provided by ten Red Cross volunteers. A Red Cross beautician service run by skilled volunteers is open weekly at Larundel Hospital. Twenty-nine young Red Cross volunteers visit Janefield Training Centre at weekends to entertain and play with the children there. Red Cross volunteers also help craft groups at Hobson Park Hospital (Traralgon).

Country Women's Association

This Association has sub-committees to help the mentally ill in many of its branches. They have also established and staffed three homecraft centres at Aradale (Ararat) Hospital, Lakeside (Ballarat) Hospital, and Mayday Hills (Beechworth) Hospital, where patients learn or regain home skills. Four vans for patient transport have been donated to country hospitals—Mayday Hills, Aradale, Lakeside, and Hobson Park. Some members work in wards at Mont Park, Aradale, and Hobson Park hospitals.

Returned Services League

This organisation arranges bus outings for ex-servicemen and women patients—thirty-nine were arranged in 1970. The R.S.L. Women's Auxiliaries usually arrange these to picnic grounds, homes, or country properties of R.S.L. members.

Personal emergency advisory service

A telephone and correspondence service is run by the Mental Hygiene Branch and staffed by trained volunteers. It began in 1960 and has 120 volunteers, both men and women, rostered for the telephone service.

Social workers at Alexandra Clinic handle the correspondence service. Until 1970 over 30,000 telephone calls had been received from lonely, confused, and suicidal people. The service is anonymous, the caller does not have to identify himself, and so can talk more freely. Volunteers refer the callers to appropriate help for their problems, using existing community resources.

Victorian aid to the mentally ill

A non-profit making registered company was formed, through the Victorian Employers' Federation, in 1958 to acquire contract work for industrial sheltered workshops in mental and psychiatric hospitals. The Board comprises fifteen volunteers who have had business experience. The turnover of work contracts has risen from \$8,000 in 1958 to \$120,000 in 1970. Any profits made are returned to patients as wages.

Helping Hand Association for Mentally Retarded Children

This Association was formed in 1945 by parents of retarded children to organise child-minding centres which have now become training centres and are subsidised by the Mental Hygiene Branch. There are now ten centres at Balwyn, Brighton, Coburg, Footscray, Ivanhoe, Northcote-Preston, Noweyung-Bairnsdale, Prahran-South Yarra, Sunshine, and Traralgon. These centres provide for about 680 retarded people from 4 to 58 years of age. Five centres have adult sheltered workshops for over 200 people. Approximately 200 volunteers help paid staff at the centres and approximately another 500 assist the centres by raising money and providing amenities.

Victorian Council for the Mentally Retarded

This is a co-ordinating body for the Helping Hand day centres run by volunteers. Members co-ordinate the work of the centres and promote standards of operation.

State Association for the Mentally Retarded

This is an amalgamation of groups of parents of retarded children in residential care of the Mental Hygiene Branch, or who are on its waiting list. They aim to ensure the needs of every intellectually handicapped child are met, and keep in close touch with bodies which might assist them in this endeavour. They also hold individual group meetings and social functions to raise funds for comforts for the children.

Apex Foundation for Research into Mental Retardation

This is a permanent Foundation established by Apex Clubs to raise funds for research into intellectual retardation. Over \$100,000 has already been collected.

"3R's" Committee (Research, Rehabilitation of the Retarded Child)

This organisation consists of professional and lay members who raise money by means of social functions for research and travelling scholarships in the field of intellectual retardation.

Janefield Training Centre Auxiliary

Formed in 1945, this Auxiliary has 120 financial members, many of them parents who work to provide outings and amenities for the children of Janefield Training Centre.

Janefield Chapel Fund

This fund was formed in 1968 to raise funds for a chapel to cost approximately \$40,000. By 1970, \$19,000 had been raised.

Sir Ronald Mack Memorial Committee

This Committee on its formation incorporated several other Committees—"Champs", the "Caritas" committee, the "Robin Hood" committee—all of which had been fund raisers for Helping Hand centres. This is still the aim of this Committee.

General

There are bands, drama groups, concert parties, church groups, service clubs, high school girls, rangers, and individuals who also give regular voluntary help to the Mental Hygiene Department. Service clubs (e.g., Rotary, Apex, etc.) are continually engaged in local aid projects. Melbourne Rotary Club, for instance, has a special Mental Health Committee which has undertaken a number of projects, including the establishment of a day hospital for psychogeriatric patients at Willsmere Hospital.

Voluntary social services, 1965; Old People's Welfare Council, 1966; Voluntary child welfare, 1967; Voluntary social welfare work for the physically handicapped, 1968; Care of the elderly, 1969; Rehabilitation, 1970; Employment of the handicapped, 1970; Royal Victorian Institute for the Blind, 1970; Victorian School for Deaf Children, 1971

Red Cross Society

The Victorian Division of the Australian Red Cross Society is responsible for all the activities of the Society in Victoria.

Red Cross is a voluntary organisation and is maintained by donations and subscriptions. Its primary responsibility is the care of ex-service personnel and dependants, but since the Second World War its civilian activities have been extended to meet various needs of the community. The principal activities carried out by the Division are listed in the following table which gives some indication of the nature and scope of the work of the Victorian Red Cross Society :

VICTORIA—RED CROSS SOCIETY

Particulars		1965-66	1966-67	1967-68	1968-69	1969-70
Income (a)	\$'000	1,197	1,337	1,341	1,502	1,501
Expenditure (b)	\$'000	1,247	1,398	1,480	1,602	1,629
Accumulation account	\$'000	1,391	1,380	1,394	1,375	1,280
Expenditure on—						
Blood transfusion service	\$'000	520	568	623	691	774
Convalescent homes and hostels	\$'000	214	224	229	240	179
Handcraft and curative training	\$'000	52	60	52	55	63
Social service and welfare	\$'000	68	80	90	100	111
Service and repatriation hospitals, including recreation centres	\$'000	120	133	153	157	153
Civilian hospital and civilian relief						
Red Cross branches and companies	number	569	572	581	587	601
Junior Red Cross Circles	number	433	477	523	510	530
Blood donations	number	103,164	106,152	112,247	109,488	112,553
Blood distributed	half litres	70,171	71,691	77,347	78,051	77,556
Serum distributed	litres	166	243	318	414	489
Transport mileage	'000 miles	749	808	890	975	1,053

(a) Excludes legacies.

(b) Excludes stock adjustments and depreciation.

Youth activities

This world wide youth movement within the Red Cross came into being through the vision of an Australian woman—Mrs Eleanor McKinnon—who recognised in the idealism and generosity of young people the means of creating a potent force for service and goodwill. During the First World War she organised a group of children to work for Red Cross in New South Wales and in 1918 the International Committee of Red Cross in Geneva gave its approval and support to the formation of the Junior Red Cross movement which was immediately accepted in three countries—Australia, Canada, and the United States of America. The Red Cross Youth movement is now established in ninety-two countries with a world membership of more than 82 million young people. Its fundamental principles are : service, health, and international understanding.

In Victoria the movement receives the support of the Education Department and independent schools. Primary school children are members of Circles and older groups are formed into Clubs. They plan their own projects and conduct their own meetings with the guidance of teacher-leaders.

Service covers a wide range of activities both within their own communities and to less fortunate children in other countries. The young people visit their local hospitals, old people, and mentally retarded children, or take children from institutions on outings. They also organise parties at Christmas and distribute numerous small gifts. More than 1,200 young people obtain their certificates in elementary or preliminary first-aid and home-nursing each year.

In addition to working in their own communities, they undertake special projects. For example, in recent years in Victoria, money has been raised to provide a bus for the East Ringwood Red Cross Transport Company, a station wagon for use by the Papua/New Guinea Red Cross Division, hundreds of dollars worth of tinned milk for distribution in India, school requisites and first-aid kits for Indonesia, and to send two migrant children on a holiday. International friendship is promoted in many ways such as study centres, the exchange of "friendship albums", school art, stamp greeting cards, and profiles.

Red Cross Service Corps

The Red Cross Service Corps comprises voluntary personnel who, after training, carry out a wide range of services. In Victoria there are 108 service companies and thirty trained groups with a membership of 4,852. Members are trained in first aid and home nursing; lectures and demonstrations are given in resuscitation; and seminar and training sessions held for special assignments such as work in hospitals and disaster relief. Five major activities of the Service Corps are as follows :

Transport. Voluntary drivers, many driving their own cars, take out-patients to and from hospitals and clinics, deliver blood to hospitals and clinics, take handicapped children to special centres and elderly folk on outings, and deliver meals to pensioners.

First aid. An important and traditional part of Red Cross work has always been to give first aid services. Members man first aid posts at disaster areas, at sporting and other similar functions, and at holiday resorts.

Community services. Assistance is given to local authorities, other organisations, and people in their own homes. This includes assistance to baby health centres with immunisation campaigns and to centres for the handicapped. In recent years much more has been done for the welfare of the sick and elderly in their own homes.

Hospital services. Various extra services are provided for patients including visiting, shopping, letter writing, distributing library books, and arranging flowers. Aides also work in casualty and outpatient departments, special clinics, or in wards and canteens.

Disaster relief. Members of specially trained teams staff Red Cross Centres during bushfires to assist with the care and feeding of fire-fighters and evacuees. They are also called on during searches for lost people, major accidents, and similar emergencies.

Blood Transfusion Service, 1971

Lord Mayor's Children's Camp, Portsea

The Lord Mayor's Children's Camp is situated on the Nepean Highway, Portsea, 59 miles from Melbourne, on high ground overlooking the entrance to Port Phillip Bay. Its object is to give selected children from country and metropolitan areas a holiday, to have each child medically and dentally examined, and to provide the services of qualified optometrists, physiotherapists, audiometrists, and radiographers. Ten camps are held annually, each camp accommodating 150 girls and 150 boys.

Friendly societies

The *Friendly Societies Act* 1958 regulates the operations of friendly societies in Victoria. The societies eligible for registration are those which provide one or more of the benefits set out in section 5 of the Act, and those which provide such other benefits as a law officer of the Crown certifies to be of mutual benefit to members and to which the facilities afforded by the Act should be extended. The latter are known as Specially Authorised Societies. Those societies which periodically close their funds, discharge their liabilities, and divide their assets, are known as Dividing Societies.

The benefits referred to include periodical payments during sickness, old age, and infirmity, as well as lump sum payments on death or on the attainment of a specified age (endowment benefits). They also include payments for hospital, medical, medicinal, and dental expenses.

The following tables give details of friendly society activities in Victoria (excluding Specially Authorised Societies) for the years 1966-67 to 1969-70 :

VICTORIA—FRIENDLY SOCIETIES: FUNDS
(\$'000)

Particulars	1966-67	1967-68	1968-69	1969-70
Ordinary societies (a)—				
Sick, funeral, and non-contributory endowment funds	17,582	18,182	18,689	19,173
Whole of life, endowment, and other assurance funds	3,166	4,049	5,306	6,705
Medical services funds	2,816	3,461	4,049	4,617
Hospital benefit funds	4,495	5,442	6,388	7,430
Medicine, management, and other funds	5,651	5,666	5,941	6,378
Dividing and other societies	1,215	1,355	1,480	1,534
Total funds	34,925	38,155	41,853	45,837

(a) Societies which provide the customary benefits, namely, sick pay, funeral, medicinal, medical, and hospital benefits.

VICTORIA—FRIENDLY SOCIETIES: MEMBERSHIP, ETC.

Particulars	1966-67	1967-68	1968-69	1969-70
ORDINARY FRIENDLY SOCIETIES (a)				
Number of societies	20	20	20	20
Number of branches	1,120	1,112	1,091	1,086
Number of members contributing for—				
Sick and funeral benefits (b)	104,455	103,077	102,250	100,629
Medical services (b)	249,373	252,679	260,344	266,074
Hospital benefits (b)	263,552	268,090	276,241	287,034
Number of widows registered for funeral benefits	7,970	8,643	8,688	8,216
Number of whole of life and endowment assurance benefits in force	17,254	20,148	22,924	26,799
DIVIDING AND OTHER SOCIETIES				
Number of societies	109	106	104	102
Number of members	47,310	50,906	51,341	50,558
ALL SOCIETIES				
Number of members who received sick pay	24,871	23,625	24,183	24,069
Number of weeks for which sick pay was allowed	409,005	396,635	388,113	364,766
Number of deaths of sick and funeral benefit members	2,589	2,481	2,586	2,405
Number of deaths of wives and widows	608	783	615	654

(a) Societies which provide the customary benefits, namely, sick pay, funeral, medicinal, medical and hospital benefits.

(b) A member may contribute for any number or all of these benefits and is entered in the table in each benefit for which he contributes.

VICTORIA—FRIENDLY SOCIETIES: RECEIPTS AND EXPENDITURE
(\$'000)

Particulars	1966-67	1967-68	1968-69	1969-70
RECEIPTS				
Ordinary societies (a)—				
Sick, funeral, and non-contributory endowment funds	1,324	1,416	1,405	1,440
Whole of life, endowment, and other assurance funds	837	1,256	1,859	2,212
Medical services funds	7,477	7,786	8,253	9,152
Hospital benefit funds	7,018	8,207	9,427	10,728
Medicine, management, and other funds	1,351	1,324	1,531	1,866
Dividing and other societies	570	614	695	779
Less inter-fund transfers	206	254	238	287
Total receipts	18,371	20,349	22,932	25,890
EXPENDITURE				
Ordinary societies (a)—				
Sick, funeral, and non-contributory endowment funds	879	816	899	955
Whole of life, endowment, and other assurance funds	222	373	601	813
Medical services funds	6,814	7,141	7,664	8,584
Hospital benefit funds	6,080	7,259	8,480	9,685
Medicine, management, and other funds	1,119	1,310	1,256	1,429
Dividing and other societies	450	474	570	725
Less inter-fund transfers	206	254	238	287
Total expenditure	15,358	17,119	19,232	21,904
Excess of receipts over expenditure	3,013	3,230	3,700	3,986

(a) Societies which provide the customary benefits, namely, sick pay, funeral, medicinal, medical, and hospital benefits.

The following table shows the amounts disbursed by societies (excluding Specially Authorised Societies) in sick pay, funeral and mortuary benefits, endowments, medical services, medicinal, and hospital benefits during the years 1966-67 to 1969-70 :

VICTORIA—FRIENDLY SOCIETIES: AMOUNTS DISBURSED IN BENEFITS
(\$'000)

Nature of benefit	1966-67	1967-68	1968-69	1969-70
Sick pay	549	544	570	590
Funeral benefits	247	248	266	248
Non-contributory endowment benefits	84	93	83	109
Whole of life, endowment, and other assurance benefits (a)	153	238	394	641
Medical services—				
Society benefit	3,127	3,355	3,658	4,178
Government subsidy	2,909	3,041	3,229	3,537
Hospital benefits—				
Society benefit	4,207	5,249	6,259	7,270
Government subsidy	1,064	1,070	1,126	1,192
Medicine	242	215	229	246

(a) During the period since 1966-67 several new types of assurance benefit have been developed.

Dispensaries

At the end of 1969-70, 34 United Friendly Societies' Dispensaries were registered under the Friendly Societies Act as separate friendly societies. The chief object for which the dispensaries are established is to provide the societies with a supply of medicine and medical and surgical appliances for members and for persons claiming through members. The number of members connected with dispensaries at the end of 1969-70 was 77,137. As the receipts and expenditure of the dispensaries are to some extent interwoven with those of the medicine and management funds of ordinary societies, they are not given here. The assets and liabilities of dispensaries at the end of 1969-70 amounted to \$3,344,585 and \$740,430, respectively.

Specially authorised societies

At the end of 1969-70 there were four societies registered under the Friendly Societies Act which did not provide any of the customary benefits of friendly societies. Their registration was specially authorised under section 6 of the Friendly Societies Act. These four societies are known as Total Abstinence Societies. Their membership at the end of 1969-70 was 90 and their assets amounted to \$268,149.

Co-operative societies

In December 1953 the Victorian Parliament passed the Co-operation Act, now the *Co-operation Act* 1958. The Act provides for the formation, registration, and management of co-operative societies which are classified into various kinds according to their objects.

The Act permits the Treasurer of Victoria to guarantee the repayment of any loan raised by a society for the implementation of its object. At 30 June 1970, 465 guarantees were in force, the amount involved being \$7,951,815.

Under the direction of the Treasurer, the Act is administered by the Registrar of Co-operative Societies, who is also Registrar of Co-operative Housing Societies. He is assisted by an advisory council constituted under the Act.

The numbers and types of co-operative societies registered under the Co-operation Act at 30 June 1966 to 1970 are shown in the following table :

VICTORIA—REGISTERED CO-OPERATIVE SOCIETIES(a)

Type	At 30 June—				
	1966	1967	1968	1969	1970
Producer	65	68	69	70	70
Trading	45	51	54	57	59
Community settlement	6	6	6	6	6
Community advancement	316	370	423	498	573
Credit	144	152	156	164	182
Associations	1	1	1	2	2
Total	577	648	709	797	892

(a) Further information regarding co-operative organisations is given on pages 671-3 of this *Year Book*.

Details of co-operative societies which submitted returns for the year ended 30 June 1970 are given in the following table :

VICTORIA—SUMMARY OF OPERATIONS OF SOCIETIES WHICH SUBMITTED RETURNS (a), 1969-70

Type	Number of societies	Number of members	Liabilities		Assets
			Members' funds	External	
			\$'000	\$'000	\$'000
Producer	63	40,401	2,411	4,914	7,324
Trading	52	30,422	2,716	3,209	5,925
Community settlement	4	269	63	116	179
Community advancement	539	41,632	1,416	4,266	5,683
Credit	166	45,852	567	13,711	14,216
Associations	2	139	—6	347	341
Total	826	158,715	7,167	26,563	33,668

(a) Further information regarding co-operative organisations is given on pages 671-3 of this *Year Book*.

Charitable trusts in Victoria

So far as is known, the law relating to charitable trusts is now substantially the same in all Australian States, and trusts are good charitable trusts if they are for the relief of poverty, the advancement of education, the advancement of religion, or for other purposes beneficial to the community not falling under any of the preceding heads. However, while the Attorney-General is the representative of the public in public charitable trusts, he does not maintain a record of those trusts and his files contain details only of such trusts as become the subject of litigation in which he intervenes by virtue of his representative position.

The subject of charitable trusts usually embraces those trusts which may be called philanthropic trusts, the word "philanthropic" embracing the word "charitable" in a very wide sense. (Philanthropic is defined in *The Concise Oxford Dictionary* as "loving one's fellow men, benevolent, humane".) Today, by virtue of being charitable in the legal sense, a considerable number of charitable trusts, which are philanthropic in the general sense, enjoy not only freedom from rules such as the rule against perpetuities (a rule designed to prevent the tying up of properties for long periods), but also enjoy freedom from revenue laws, and indeed freedom from almost every control so long as the trustees administer their trusts in accordance with the powers vested in them as trustees.

One of the greatest difficulties in compiling any record or statistics of charitable trusts has arisen from the fact that in Victoria (as in the other States) there is no statutory or other legal requirement that details of such trusts must be placed in any public records. Charitable institutions such as hospitals publish from time to time lists of their benefactors who in many cases have made their benefactions in the form of gifts of sums of money without specifying any precise use to which the money is to be put. From a study made in 1968 it became apparent that a large proportion of the funds of charitable trusts in Australia is devoted to health, education, and welfare. This study was not confined to Victoria, but covered Australia. However, it was found that just as the greatest concentration of population and of business is in Victoria and New South Wales, so there appeared to be in those States the greatest number of charitable trusts. The fields of health, education, and welfare are also fields in which governments are playing an increasing part and it could be that charitable and philanthropic foundations and trusts may well look elsewhere for activities which lack the same measure of support—the arts, the humanities, and the social sciences, which are more sparingly supported from official sources.

The particular role to be played by trusts and foundations in the world of philanthropy has not received more than passing attention in Australia, and this is reflected in a comparison of the number and size of trusts or foundations in the United States of America and in Britain as appears from directories published in those countries. In Victoria, so far as is known, the order in which the various fields of interest are supported by philanthropic trusts and foundations is as follows—welfare, sciences, education, health, humanities, religion, and international activities, with welfare supported by approximately twice as many trusts as any other field of interest.

In a philanthropic conference held in England in 1966, the report of which was published under the title "Foundations and Government", one of the chief topics for discussions was the role of private trusts or foundations in relation to the growing responsibility accepted by governments for the health, education, and welfare of their citizens. There was general agreement, however, that increased government intervention, far from displacing private philanthropy, tended to enhance its role.

One view that commends itself is that before charitable and philanthropic trusts and foundations can fulfil their most useful functions it will be necessary for their fields of interest and the amounts of money available to be placed on record in some public office and that some judicial body be empowered after proper investigation and inquiry to divert trust funds over-supplied to some particular object to another similar object which may be under-supplied.

An intending creator of a charitable or philanthropic trust must have particular regard to the effect of a number of statutory revenue provisions, among which are the Victorian Stamps Act insofar as it imposes duties on settlements and declarations of trust; the Commonwealth Gift Duty Act; the Victorian Probate Duties Act; the Commonwealth Estate Duty Act; and the Commonwealth Income Tax Assessment Act. Experience has shown that the creators of charitable and philanthropic trusts have rooted objections to the moneys given by them for trust purposes being depleted by the payment therefrom of taxes. Thus in a trust in Victoria, in which the trust fund is held

in perpetuity to pay the income to such charitable institutions and funds and for such charitable purposes as the trustee (a trustee company) in its discretion may decide, the discretion of the trustee is tempered by the direction that in the exercise of its discretion the trustee is limited to funds, institutions, and purposes to which gifts are allowable deductions for income tax purposes, and are not chargeable with Victorian stamp and probate duties and Commonwealth gift and estate duties.

It is important that if charitable and philanthropic funds available are to reach the best recipients then the existence of the funds must be as widely known as possible. Victoria is well served with philanthropic trusts, such as the Felton Bequests, the Myer Foundation, the Ian Potter Foundation, the Buckland Foundation, the Collier Charitable Fund, and many others perhaps not quite so well known, which have not been diverted from their philanthropic purpose by the exacting requirements of revenue legislation. Reference is made in the *Victorian Year Book* 1970 * to certain charitable trusts operating in Victoria and information as to the functions and disbursements of other philanthropic trusts in Victoria is contained in the *Directory of Philanthropic Trusts in Australia* published by the Australian Council for Educational Research in 1968.

JUSTICE AND THE ADMINISTRATION OF LAW

Law in Victoria

Historical

Law is the body of rules, whether proceeding from formal enactment or from custom, which a particular state or community recognises as binding on its members or subjects, and enforceable by judicial means. It has been said that "substantially speaking, the modern world acknowledges only two great original systems of law, the Roman and the English".

English law came to Australia with Governor Phillip in 1788, though for many years in a severely attenuated and autocratic form. Immediately prior to Federation, the law operative in Victoria consisted of the laws enacted by its legislature up to that time; the law of England applicable to the Colony up to 1828; the laws of New South Wales up to 1851; and certain Imperial statutes since 1828 applicable as of paramount force, or adopted by the local legislature since. In addition the common law applied.

In 1901 the Commonwealth of Australia was established by an Imperial Act under which certain powers were conferred upon the newly created Commonwealth Parliament, and the remaining powers were left to the Parliaments of the six States. Subject to that proviso, State law in Victoria continues as it did prior to Federation and Victoria, like the other States, retains some sovereign powers.

Legal profession

Prior to 1891 the legal profession in Victoria was divided into two separate branches, barristers and solicitors—as it still is in England and

* See *Victorian Year Book* 1970, page 544 containing brief details of Royal Children's Hospital Research Foundation, and page 545 containing some information about the Thomas Baker, Alice Baker, and Eleanor Shaw benefactions and pages 502-4 of this *Year Book* on the Walter and Eliza Hall Institute of Medical Research.

in New South Wales. Solicitors prepared wills, contracts, mortgages, and transfers of land, and instituted legal proceedings generally. Barristers appeared for litigants and accused persons in court and wrote opinions on legal questions in chambers. A litigant or accused person could not approach a barrister directly, but only through a solicitor who "instructed" the barrister for him.

In 1891 Parliament amalgamated the two branches, and since then every Victorian lawyer has been admitted to practice as a barrister *and* solicitor, and is entitled to do the work of both. Despite this compulsory legal fusion most lawyers voluntarily continued the segregation of the profession into two separate branches as before, though a few practitioners took advantage of their legal rights. These latter have their successors today, although most Victorian lawyers, on admission to practice, still choose to make their career in one or other of the two branches—not in both.

Legal Departments and officers

The political head of the Law Department is the Attorney-General, under whose direction and control the Department functions. The Solicitor-General, who advises the Government and appears for the Crown in important constitutional, criminal, and civil cases, is a practising barrister, appointed, under the provisions of the Solicitor-General Act, by the Governor in Council, from among Queen's Counsel.

The administrative problems of the Law Department are the responsibility of the Secretary, who is a public servant. Included in the Department is the Crown Solicitor, who gives legal advice to government departments, and acts as solicitor for the Crown in all its cases, both criminal and civil. In the former, he is the instructing solicitor to the Prosecutors for the Queen, who appear for the Crown in criminal matters in the Supreme and County Courts. There are eight such Prosecutors who, like the Solicitor-General, are not public servants, but barristers.

Public Solicitor

The office of the Public Solicitor is controlled by the Attorney-General as head of the Law Department through the Public Solicitor who is a barrister and solicitor of the Supreme Court of Victoria.

Until 1 June 1970 the office assisted persons in civil and matrimonial matters under the Poor Persons Legal Assistance Act. That Act was repealed by the *Legal Aid Act* 1969. Legal assistance is now provided by the State of Victoria through the Public Solicitor only in the following criminal matters:

1. where any person has been committed for trial or has received Notice of Trial for an indictable offence against the laws of Victoria;
2. where any person has been charged with treason, murder, or manslaughter; and
3. to an appellant to the Full Court of the Supreme Court upon any appeal with respect to an indictable offence and to the Privy Council in respect of an offence for which he has been sentenced to death.

The Attorney-General may grant an application for legal assistance if he is of the opinion that it is desirable in the interests of justice that an applicant should have legal representation on any such proceedings and that the applicant is without adequate means to provide legal assistance for himself.

A summary of the criminal cases dealt with by the Public Solicitor's Office during the years 1966 to 1970 follows:

VICTORIA—PUBLIC SOLICITOR'S
OFFICE: CASES DEALT WITH

Year	Number of criminal cases dealt with
1966	560
1967	590
1968	612
1969	647
1970	772

Legal Aid Committee

The *Legal Aid Act* 1969 transferred some of the functions of legal assistance to poor people, previously administered by the Public Solicitor, to the Legal Aid Committee from 1 June 1970. This Committee now provides legal assistance for poor people in civil and matrimonial matters and also has universal jurisdiction to assist in any other kind of legal proceeding which cannot be undertaken by the Public Solicitor. A person who is unable to afford the services of a private solicitor may approach the Legal Aid Committee for the assignment of a solicitor under the terms and conditions of the Act. The following business was conducted by the Legal Aid Committee during 1970 :

VICTORIA—LEGAL AID COMMITTEE BUSINESS, 1970 (a)

Type of case	Number of applications	Number actually assisted
Divorce	1,498	1,089
Maintenance	1,898	1,112
Custody and affiliation	399	212
Motor accident damages claims	573	300
Criminal (Magistrates' Courts and County Court appeals)	565	388
Civil causes	873	414
Workers compensation	160	91
Probate and testators family maintenance	119	33
Others	1,404	106
Total	7,489	3,745

(a) Prior to 1 June 1970 cases were dealt with by the Public Solicitor's Office.

Further references, 1962-1971

High Court of Australia

The High Court of Australia was created by the Commonwealth of Australia Constitution which provided for the vesting of the judicial power of the Commonwealth "in a Federal Supreme Court, to be called the High Court of Australia, and in such other federal courts as the Parliament creates, and in such other courts as it invests with federal jurisdiction". The Constitution also provided that the High Court should consist of a Chief Justice and so many other Justices, not less than two, as the Parliament prescribes.

In 1903 the High Court was first constituted by the appointment of Sir Samuel Griffith (Chief Justice) and Justices Barton and O'Connor who held the first sittings of the High Court in Melbourne in October 1903 and sat shortly afterwards in Sydney in the same year.

The number of Justices was increased from three to five in 1906 and was again increased in 1912 to seven. In 1933 the number was reduced to six and in 1946 the number of Justices was restored to seven. The Justices are all appointed for life as is required by the Constitution as it has been interpreted by the Court.

The Constitution provided for the High Court to have jurisdiction to hear and determine appeals from all judgments, decrees, orders, and sentences of Justices of the High Court exercising original jurisdiction of that Court, or of any other federal court. It also provided that the Court has the like jurisdiction to hear appeals from the Supreme Court of a State. The High Court thus became part of the hierarchy in the judicial system of each State. The Constitution provided also for the High Court to exercise original jurisdiction in matters arising under any treaty; affecting consuls or other representatives of other countries; in which the Commonwealth or a person being sued on behalf of the Commonwealth is a party; between residents of different States or between a State and a resident of another State, or in which a writ of mandamus* or prohibition or injunction is sought against an officer of the Commonwealth.

The jurisdiction of the High Court has been exercised over the years to a considerable degree in particular by the use of prerogative writs of prohibition and mandamus in relation to Commonwealth officers and to control the jurisdiction of tribunals constituted under Commonwealth legislation, e.g., Commonwealth Court of Conciliation and Arbitration (prior to 1956), Commonwealth Conciliation and Arbitration Commission, and other bodies.

In addition the Constitution provided that the Parliament may make laws conferring jurisdiction on the High Court in any matter arising under the Constitution or involving its interpretation, arising under any laws made by the Parliament, and in admiralty or in maritime matters. Pursuant to the last-named provision the Parliament of the Commonwealth has in section 38 of the *Judiciary Act* 1903-1969 conferred exclusive jurisdiction upon the High Court in:

- “(a) Matters arising directly under any treaty;
- (b) Suits between States, or between persons suing or being sued on behalf of different States, or between a State and a person suing or being sued on behalf of another State;
- (c) Suits by the Commonwealth, or any person suing on behalf of the Commonwealth, against a State, or any person being sued on behalf of a State;
- (d) Suits by a State, or any person suing on behalf of a State, against the Commonwealth, or any person being sued on behalf of the Commonwealth;
- (e) Matters in which a writ of mandamus or prohibition is sought against an officer of the Commonwealth or a federal court.”

As yet it has not conferred jurisdiction on the High Court in matters arising under any laws made by the Parliament but has done so in relation

* A form of writ to compel a person or body to carry out the duty which they are required to perform by law.

to a number of particular statutes such as the Income Tax Assessment Act, the Patents Act, the Trade Marks Act, and the Life Insurance Act. In addition, jurisdiction has been conferred on the High Court under the Commonwealth Electoral Act whereby a Justice of the High Court sits as a Court of Disputed Returns.

However, although original jurisdiction has been exercised to a considerable extent over the years, the primary functions of the High Court have been, first, interpreting the Constitution of the Commonwealth, and second, hearing and deciding appeals from judgments of the Courts of the States and of the Courts of Territories.

The Constitution provided also that no appeals should be taken to the Privy Council from a decision of the High Court upon any question howsoever arising as to the limits *inter se* of the Constitutional powers of the Commonwealth or those of any State or States or as to the limits *inter se* of the Constitutional powers of any two or more States unless the High Court decides that the question is one that should be determined by Her Majesty in Council. Under this particular section over the years a number of applications have been made to the High Court for such a certificate but in only one instance has a certificate been granted.

In 1968 the *Privy Council (Limitation of Appeals) Act* 1968 enacted that special leave to appeal to Her Majesty in Council from a decision of the High Court may be asked only in a matter where the decision of the High Court was given on appeal from the Supreme Court of a State otherwise than in the exercise of federal jurisdiction and did not involve the application or interpretation of the Constitution, or of a law made by the Parliament, or of an instrument made under a law made by the Parliament. The provisions of this Act do not apply in respect of a decision given in a proceeding commenced before the commencement of the Act, namely, 1 September 1968. Matters commenced after that date which involve Federal jurisdiction may not be taken on appeal to the Privy Council.

Section 10 of the *Judiciary Act* 1903 provided that the principal seat of the High Court should be at the seat of government and that until such time as the seat of government was established the principal seat of the Court should be at such place as the Governor-General from time to time appointed.

By minute dated 2 October 1903, the Governor-General ordered and declared that until the seat of government should be established or until otherwise ordered the principal seat of the High Court should be at Melbourne. In 1926 section 10 of the *Judiciary Act* was amended to provide that on and after a date to be fixed by proclamation the principal seat of the High Court should be at the seat of government and that until the date so fixed the principal seat of the High Court should be at such place as the Governor-General from time to time appointed.

Administrative law in Victoria

Nature and background

The subject matter of administrative law is the degree of control exercisable by the law over decisions affecting the rights and interests of citizens made by bodies or tribunals which function apart from the traditional

courts of law or over bodies which possess subordinate legislative powers under authority given by Parliament. It is necessary to add the second category, as administrative law does look at such bodies of general rules as regulations made by the Governor in Council, the by-laws made by local authorities, and such productions as price fixing orders which stand on the dubious hinterland between legislative acts and administrative decrees.

Administrative law in Victoria has the same characteristics as administrative law in the United Kingdom. The principles are somewhat chaotic and represent changing social attitudes ; the border lines of distinctions are blurred ; and many rules of substantive law are simply the result of the different types of procedural machinery evolved. The remark of Lord Reid in *Ridge v. Baldwin* in 1964 that "We do not have a developed system of administrative law—perhaps because until fairly recently we did not need it" is just as true for Victoria as for England. One pervading characteristic is the extent to which the rules governing the particular remedy of the prerogative writs have shaped the substantive law concerning the rights of the subject in respect of the decisions of administrative bodies.

The general trend of social thought has accepted the necessity of the existence of so-called administrative tribunals which make important decisions affecting many areas of activity impinging on the interests of the individual, for example, in connection with the granting or cancellation of licences, the taking of private property and the awarding of compensation therefor, the conservation of natural resources, and the controls exercisable over many types of industrial or commercial undertaking. Such tribunals can function with a degree of celerity and lack of formality which could not be possessed by a court of law and can take account of factors which the latter could not. On the other hand, there is a real danger that these tribunals, which can proceed speedily, ignore the rules of evidence, and are usually under no necessity of giving reasons for their decisions, may be tempted to ignore the guidelines evolved by the courts of law over many centuries designed to ensure a fair hearing to persons whose interests are involved or even to ignore the dictates of the particular statute involved when that seems to run counter to the social result which the administrative tribunal is trying to achieve.

The courts of law, therefore, have kept some controls in their hands. In general, they proclaim an intention not to pass judgment on the merits of the decisions of administrative tribunals ; subject to certain recognised exceptions the standard view is that they only determine whether or not the tribunal had jurisdiction to do what it has done and has observed certain rules of procedural fair play to which the rather grandiose term "principles of natural justice" has been applied.

Observance of the administrative-judicial distinction

Not all bodies exercising the general kind of decision-making functions to which attention has been drawn are administrative tribunals. It has been noted above that much of administrative law has been framed by the importance given to remedies. The reason for this is historical. Of course, in a broad sense, the powers of all administrative bodies are determined by the terms of the statutes which bring them into existence and if such bodies exceed the authority given by those statutes, then their decisions or orders are void. Different approaches, however, came into existence for historical reasons. The general approach to the exercise of powers by public bodies was that

embodied in the doctrine of *ultra vires*. This was developed by English courts in the course of the nineteenth century in approaching the question of the exercise of powers by railway companies and other authorities exercising powers which involved incursions into private rights. Here the inquiry was simply whether the body had exceeded the powers granted to it by its respective statute. If it had, then its action was *ultra vires*, that is to say, a nullity, and it had no defence to an action for damages and could also be restrained by injunction. Long before this the superior courts of law, however, had exercised the function of issuing the prerogative writs to justices of the peace and inferior courts of law who or which were exercising judicial functions of decision-making, where there was an allegation that they had acted improperly. In earlier times the control exerted by these writs was quite general but later came to be in the main exercisable only when the inferior courts had acted without jurisdiction, had exceeded the jurisdiction accorded to them by law, or had failed to exercise their jurisdiction in a situation where they were bound by law to exercise it. This exercise of control on the part of the superior courts later came to be extended to tribunals whose powers, functions, and general method of proceeding were somewhat analogous to those of courts of law. One has to be designedly somewhat vague here in view of later developments.

The control exercised by the superior courts of law through the prerogative writs was in terms of *jurisdiction* not of *power*. This led to a profound difference. The scrutiny by the courts of the exercise of powers by railway companies, canal companies, drainage boards, and the like was in terms of *ultra vires*. The inquiry was whether the body had gone wrong in applying the terms of the statute under which it had to function; if it had, its decision to act was simply wrong and exposed it to such liability as the common law recognised in ordinary suits between subject and subject. However, under the prerogative writs the inquiry is simply into *jurisdiction*. It is possible that the tribunal may have gone wrong in law without exceeding its jurisdiction.

If so its action did not come within the purview of the prerogative writs; it was merely an error *within* jurisdiction. This is often expressed in the aphorism that administrative tribunals may have "a right to go wrong".

The confining of the scope of the prerogative writs to a certain area and to certain types of administrative body has always been in theory observed. However, as decisions multiplied it has become more and more difficult to discern any rational line of demarcation. At one stage in the 1930s it was considered possible to separate functions neatly into those labelled administrative, judicial, and quasi-judicial, the two latter attracting the prerogative writs, but the first not. However, this distinction proved too conceptualistic and was impossible to maintain in the light of the great variety of functions apparent in cases which actually came before the courts. Nowadays little is heard of it and even the broad distinction between administrative and judicial now tends to be played down and in one important area, namely, the "natural justice" cases, seems to have virtually disappeared in recent English decisions. The tendency now is to confine the application of the prerogative writs to the case where the tribunal is bound to "proceed judicially". This again is a phrase of indefinite import—much depends on the nature and functions of the tribunal and the type of rights and interests which its decision affects.

In this article it has been obviously necessary to retain the words "administrative" and "judicial", but this is subject to the warning above expressed.

Ultra vires rule

This is the general rule and is applied to a variety of bodies, some of which may be merely public enterprise corporations operating a particular kind of undertaking such as an electricity authority; others may be bodies or individuals possessing powers of granting or withholding licences or permits. One must also not forget that the rule is applied to bodies exercising subordinate powers of legislation such as the Governor in Council or a Minister entrusted with the power of making regulations or rules of general operation and local government councils. In this latter class of case the rule of *ultra vires* is operated in its narrow sense, namely, simply an inquiry as to whether the regulations and by-laws are within the limits laid down by the empowering statute. In the case of bodies possessing purely administrative powers or vested with a power to exercise a discretion, the net spreads wider. Where discretionary powers of making decisions are given, the authority must exercise the discretion in good faith and without being swayed by ulterior motives, must not exercise it by reference to irrelevant criteria, must not exercise it at the dictation of some outside body, and must not make any contract or arrangement which would fetter or abridge the future exercise of the discretionary powers. Non-observance of any of these requirements means that the purported exercise of the discretion is *ultra vires*. The result may be merely to expose the body to such liabilities for damages as exist under the common law of tort, as in the case of *ultra vires* or negligent acts by public authorities carrying on an undertaking. In such cases, and also in the case of wrongful exercise of a discretion, the plaintiff may be granted an injunction restraining the doing of an act or the implementation of a discretionary exercise. To an increasing extent in England and also now (to some extent) in Australia, the courts merely issue declaratory judgments which, although carrying no legal enforcement, are not likely to be challenged by public authorities.

Prerogative writs

As noted above, these writs are available when the administrative body by reason of its functions and context is under a duty to "proceed judicially". The two main writs are *certiorari* which directs the record and proceedings before the administrative tribunal to be brought before the superior court and quashed, and *prohibition* which prohibits the lower tribunal from proceeding further. The differences between these two writs are mainly technical; the main distinction is that under prohibition there still must be something further for the lower tribunal to do, that is to say it must not be entirely *functus officio*.

Normally these writs lie only where the lower tribunal has assumed a jurisdiction it does not possess or exceeded the jurisdiction it does possess. However, there is one exception. The writ of *certiorari*, in addition, lies where there is an error of law, even though an error not going to jurisdiction, which is apparent on the face of the record. The apparent usefulness of this type of *certiorari* has however been much lessened by the lack of clarity as to what is meant by "record" in the case of an administrative tribunal.

It must be noted, moreover, that in recent years in the English courts

there has been an immense increase in the content of the concept of "jurisdiction". An error on the part of the lower tribunal as to the existence of a fact on which its jurisdiction has been made to depend has always been regarded as jurisdictional, but in recent years the concept of "excess of jurisdiction" has been extended to the case where the tribunal misconceives its function by applying criteria which are irrelevant. In one important recent House of Lords case, *Anisminic v. Foreign Compensation Commission*, an error made by an administrative tribunal in the way in which it interpreted a statute was held to pertain to jurisdiction. It is obvious that judgment as to these matters must lie very much with the court which is entertaining the application for the prerogative writ and many authorities believe that now the courts merely pay lip service to the rule that they do not go into the merits of the administrative decision.

The writ of *mandamus* is different from the other two. It has never been limited to Acts of a judicial nature. In essence it is a writ which simply compels the performance of a duty which lies on a public functionary. Under this broad formulation the courts have used the writ of *mandamus* in cases where public bodies in general have exercised discretions reposed in them in bad faith or with reference to irrelevant criteria; in fact the same situations as noted above in dealing with *ultra vires*. This writ, therefore, is capable of use in areas where the other two are not.

Natural justice

The rule of natural justice, namely, that in certain circumstances the citizen whose interests are likely to be affected by the decision of an administrative body has a right to be able to present his case before it and to have a decision free from bias in the legal sense, has spread beyond the bounds of the traditional distinction between judicial and administrative functions. It has always been accepted that when it is a question of "property rights" being involved, the citizen has a right to be heard whatever the nature of the proceedings, and a certain Privy Council decision that a licence to trade is not a property right seems now to be discredited. Moreover, in *Ridge v. Baldwin* in 1964 the House of Lords extended the whole concept far beyond the property area in holding that a police constable who could only be dismissed on a showing of default or negligence on his part was entitled to a hearing before dismissal. There have been sundry later decisions and it is not certain in what direction the law is headed. It seems likely that the right to a hearing will exist when the person's rights are affected *and* the tribunal has to decide *some kind of issue* relating to him before acting in a specified kind of way.

Functions of law in a community, 1961; Legal system in Victoria, 1961; Criminal law and its administration in Victoria, 1963; Law of torts in Victoria, 1964; Law of contract in Victoria, 1965; Law of retail sales and hire purchase in Victoria, 1966; Company law in Victoria, 1967; Law relating to export trade, 1968; Commonwealth and State taxation law, 1969 and 1970; Industrial law in Victoria, 1971

Courts in Victoria

The courts of justice are the base upon which administration of the legal system is built. They are graduated in status, according to the gravity of the matters which may be brought before them, and may be conveniently classified into three divisions: the Supreme Court, the County Court (the criminal section of which was formerly called General Sessions), and the Magistrates' Courts.

Supreme Court

The Supreme Court, as its name implies, and by virtue of the Supreme Court Act, is the supreme court of the State, having jurisdiction over all matters, criminal and civil (including probate and divorce) which have not been excluded by statute. It is the counterpart of the English Courts of Queen's Bench, Chancery, and Probate, Divorce, and Admiralty. The Court consists of a Chief Justice and sixteen puisne judges, appointed from the ranks of practising barristers of not less than eight years standing, and retiring at the age of 72. (Judges of the Supreme Court other than the Chief Justice are called puisne judges.)

The Full Court (usually three, and sometimes five, judges) hears and determines appeals from single judges of the Supreme Court and from the County Court, and criminal appeals from the Supreme Court and County Court.

The main activities of the Supreme Court are at Melbourne, but judges go "on circuit" to Ballarat, Bendigo, Geelong, Hamilton, Horsham, Mildura, Sale, Shepparton, Wangaratta, and Warrnambool.

The officers of the Court are the Masters (three at present), the Taxing Master, the Prothonotary, the Sheriff, and the Registrar of Probates. The Masters deal with various matters entrusted to them by Rules of Court made by the judges; are responsible for the investment of moneys ordered to be paid into court; and are Registrars in divorce. The Taxing Master fixes and settles bills of costs. The Masters and the Taxing Master must be barristers and solicitors of five years standing, or, in the case of the Taxing Master, of equivalent experience. The Prothonotary is virtually the secretary of the Court. Writs are issued from his office, and he has the custody of documents filed therein. The Sheriff who, like the Prothonotary, is a public servant—the Masters and Taxing Master are not under the Public Service Act—is responsible for the execution of writs, the summoning of juries, and the enforcement of judgments. There is a Deputy Prothonotary and a Deputy Sheriff at all Supreme Court circuit towns. The Clerk of Courts acts as such in each instance. The Registrar of Probates and the Assistant Registrar of Probates deal with grants of probate and administration of the estates of deceased persons in accordance with section 12 of the *Administration and Probate Act 1958*.

Civil proceedings in the Supreme Court are commenced by the plaintiff issuing, through the Prothonotary's Office, a writ (properly called a writ of summons) against the defendant from whom he claims damages or other remedy. The writ is a formal document by which the Queen commands the defendant, if he wishes to dispute the plaintiff's claim, to "enter an appearance" within a specified time; otherwise judgment may be given in his absence. A defendant who desires to defend an action files a "memorandum of appearance" in the Prothonotary's office.

When the matter comes before the Court, it is desirable that the controversial questions between the two parties should be clearly defined. This clarification is obtained by each side in turn filing documents, stating its own case, and answering that of its opponent. Such statements and answers are called "pleadings", and this method of clarifying the issues has been practised in England from the earliest times, and is as ancient as any part of English procedural law.

Ultimately the action comes to trial, before a judge alone, or a judge and jury. When a judge sits alone he decides questions of both law and fact. If there is a jury, the judge directs them on the law; the jury decides the facts. The judgment of the Court usually provides for payment by the loser of his opponent's legal costs. Normally these are assessed by the Taxing Master. The disappointed party in the action has a right of appeal to the Full Court. If a successful plaintiff fails to obtain from the defendant money which the latter has been ordered to pay, he may issue a writ of *feri facias*, addressed to the Sheriff and directing him to sell sufficient of the defendant's real and personal property to satisfy the judgment.

There is no general right of appeal in civil matters, *on the facts*, from a decision of a Magistrates' Court. Nevertheless, a dissatisfied party may apply to a Supreme Court judge to review the case, *on the law*.

An appeal lies as of right from decisions of the Supreme Court to the High Court of Australia. An appeal from the Supreme Court or the High Court to the Judicial Committee of the Privy Council lies as of right in certain cases, and at the discretion of the Court in other cases. (See page 561.)

The following table gives particulars of Supreme Court civil business during the five years 1966 to 1970 :

VICTORIA—SUPREME COURT CIVIL BUSINESS

Particulars	1966	1967	1968	1969	1970
Number of places at which sittings were held	11	11	11	11	11
Causes entered—					
For assessment of damages	28	30	28	10	12
For trial	1,533	1,822	1,702	1,496	2,015
Number of cases listed for trial—					
By juries of six	1,155	951	1,292	1,224	1,246
By a judge	606	598	517	532	527
Verdicts returned for—					
Plaintiff	123	122	76	115	186
Defendant	6	9	1	15	21
Amount awarded \$'000	795	723	892	1,108	1,495
Writs of summons issued	5,804	4,020	4,640	5,028	5,847
Other original proceedings	300	133	165	166	154
Appellate proceedings (other than criminal appeals) heard and determined—					
By Full Court	53	61	62	61	58
By a judge	77	86	85	142	93

NOTE. Changes in the civil jurisdiction of the courts and in the number of cases being settled out of court have resulted in fluctuations in court business

County Court

The County Court has jurisdiction in civil matters where the amount claimed does not exceed \$4,000 in ordinary cases and \$8,000 in motor vehicle accident cases, and in criminal cases all indictable criminal offences (i.e., broadly, those in respect of which the accused will be tried by a jury) are triable save treason, murder, attempted murder, and certain other statutory exceptions. The County Court also sits, without a jury, as an Appeals Court to hear appeals from Magistrates' Courts. In theory, justices of the peace may sit with the judge of the County Court, but in fact they never do. County Court judges must be practising barristers of seven years standing and retire at the age of 72. No judge, either of the Supreme Court or County Court, is, of course, under the Public Service Act. All are appointed by the Governor, on the advice of the Government,

and once appointed become independent of the executive. In 1970 there were twenty-two County Court judges.

The County Court sits continuously at Melbourne, and visits eight circuit towns throughout the State as well as the ten towns also visited by the Supreme Court. The principal officer of the court is the Clerk of the Peace and Registrar of the County Court at Melbourne, who occupies a position parallel to that of the Prothonotary of the Supreme Court. He is a public servant, appointed from among senior clerks of courts. The clerk of courts at each circuit town is also Clerk of the Peace and Registrar of the County Court for his particular bailiwick.

Particulars of County Court civil cases for the years 1965 to 1969 are shown in the following table :

VICTORIA—COUNTY COURT CIVIL CASES

Year	Number of cases tried	Amount sued for	Amount awarded (a)
1965	1,916	\$'000 2,944	\$'000 1,967
1966	1,966	8,323	992
1967	2,139	8,914	1,117
1968	2,266	9,772	1,330
1969	3,249	42,025	6,416

NOTE. See footnote to previous table.

(a) These figures do not include instances where judgment was entered by consent or default.

The table below shows the number of writs received by the Sheriff in the five years 1966 to 1970 :

VICTORIA—WRITS RECEIVED BY THE SHERIFF

Year	Sovereign's writs against person and property	Subjects' writs against—		Total
		The person	Property	
1966	.	8	832	840
1967	3	9	786	798
1968	9	11	847	867
1969	10	7	827	844
1970	4	8	913	925

Magistrates' Courts

Magistrates' Courts, which sit at Melbourne and suburbs, and at approximately 200 other towns throughout Victoria, are presided over by stipendiary magistrates and justices of the peace, the administrative work being done by a clerk of courts. Stipendiary magistrates are public servants, appointed under the Public Service Act, but independent in the exercise of their judicial functions. They retire at the age of 65. Justices of the peace are citizens of standing in the community—both men and women—who have been granted a Commission of the Peace, and who serve in an honorary capacity, being retired from judicial functions at the age of 72. As well as having practical experience in Magistrates' Courts, a clerk of courts must pass an examination conducted by the Department. Stipendiary magistrates are, ordinarily, clerks of courts of ten years' standing, who have passed an additional examination, and they attain the Bench as vacancies occur.

Magistrates' Courts deal summarily with the less serious criminal cases; hold preliminary inquiries in indictable criminal offences; and have a civil jurisdiction where the amount involved does not exceed \$200 in ordinary debt cases, \$600 in cases of contract and, subject to certain exemptions, in cases of tort, and \$1,000 in any action in tort arising out of any accident in which a vehicle is involved. (A tort is a wrong or injury committed by one person against another, or an infringement by one person of another person's right.) Children's Courts deal with juveniles under seventeen years of age, and Coroners' Courts conduct inquiries where the cause of death appears to be violent or unusual.

When an accused person is charged with an indictable criminal offence, a Magistrate's Court holds a preliminary inquiry to decide, not his guilt or innocence, but whether there is sufficient evidence to justify him being tried at all. If the evidence warrants it, the magistrates transmit the matter to the appropriate court—Supreme Court or County Court. There the accused stands trial before a judge and jury, the prosecution case being conducted by a prosecutor for the Queen. The judge directs the jury on the law, and sentences the prisoner if he is convicted. The jury are the sole judges, on the facts, of the guilt or otherwise of the accused, who is presumed to be innocent until (and unless) they find him guilty. The onus is upon the prosecution to prove such guilt to the satisfaction of the jury, and to prove it beyond reasonable doubt.

VICTORIA—MAGISTRATES' COURTS: CASES OF A CIVIL NATURE

Particulars	1966	1967	1968	1969	1970
Civil cases—					
Number heard	207,727	204,336	208,682	200,801	211,893
Debts or damages—					
Claimed	\$'000 20,146	20,340	20,800	21,025	23,663
Awarded	\$'000 15,540	17,050	16,927	17,246	18,361
Other cases—					
Eviction cases (a)	3,551	3,233	3,250	3,349	3,130
Fraud summonses	9,099	10,079	10,978	11,270	9,737
Garnishee cases	20,047	20,851	20,272	19,680	17,264
Maintenance cases	5,460	6,001	6,732	7,264	8,166
Show cause summonses	32,501	31,162	37,596	37,440	36,149
Applications under Landlord and Tenant Acts	5	47	22	84	4
Miscellaneous	53,703	61,154	66,979	61,925	55,776
Licences and certificates issued	22,088	24,252	26,910	26,564	27,830

NOTE. See footnote to table on page 567.

(a) Figures shown represent cases listed before Courts.

Particulars of criminal cases and certain other misdemeanours heard in Magistrates' Courts are shown on pages 574–6.

Consolidation of the Statutes, 1961

Bankruptcies

A Bankruptcy Act passed by the Commonwealth Parliament in October 1924, and amended in 1927, was brought into operation on 1 August 1928. It superseded the Bankruptcy and Insolvency Acts of the States, with the exception of any provisions relating to matters not dealt with in the Commonwealth Act. On 4 March 1968 the *Bankruptcy Act 1924–1965* was repealed and the *Bankruptcy Act 1966* came into operation.

The number of bankruptcies, etc., in Victoria during the five years 1965-66 to 1969-70 and the amount of liabilities and assets relating to them were as follows :

VICTORIA—BANKRUPTCIES

Year	Bankruptcies	Orders for administration of deceased debtors' estates	Arrangements with creditors without sequestrations	Total
NUMBER				
1965-66	514	8	72	594
1966-67	494	2	63	559
1967-68	520	4	59	583
1968-69	518	2	82	602
1969-70	489	5	111	605
LIABILITIES (\$'000)				
1965-66	3,938	512	2,773	7,223
1966-67	7,079	26	2,051	9,157
1967-68	4,567	43	1,857	6,468
1968-69	3,618	26	1,786	5,430
1969-70	5,011	20	2,052	7,083
ASSETS (\$'000)				
1965-66	1,204	386	2,534	4,125
1966-67	2,702	11	1,172	3,885
1967-68	1,318	21	1,173	2,512
1968-69	1,685	18	1,023	2,726
1969-70	1,425	6	1,823	3,254

Children's Court

The Children's Court, which began in Victoria in 1906, is held wherever a Magistrate's Court sits in the Melbourne metropolitan area and in various provincial towns and cities. Beyond the metropolitan area the Court is usually held on the same day as the Magistrate's Court and presided over by the same Stipendiary Magistrate, but honorary Special Magistrates are appointed for some Courts.

In the metropolitan area, two Special Stipendiary Magistrates are appointed and they visit about thirty Courts at regular intervals; all metropolitan Children's Courts are administered from the Melbourne Children's Court.

Jurisdiction

The Court's jurisdiction is normally restricted to children under seventeen years of age. A child may be brought before the Court for an offence committed before his seventeenth birthday provided the appearance takes place before his nineteenth birthday.

Two types of cases come before the Court, namely, offences and applications under the Children's Welfare Act.

Offences

The Court has no jurisdiction in civil matters, adoption, or civil maintenance.

In dealing with offences the Court follows the practice and procedure of Magistrates' Courts. However, it has considerably wider powers than Magistrates' Courts and may deal with any offence except homicide. The child (or the parent if the child is under fifteen years of age) must always consent to the Court dealing with an indictable offence in a summary manner, otherwise the matter would be tried by a jury in a higher court. Consent is given in almost all cases.

Applications

The police and certain others may apply to the Court for an order declaring a child "in need of care and protection". The Children's Welfare Act lists the categories which make such an application possible.

Order of the Court

The primary aim of the Children's Court is reformation and rehabilitation of the offender. Punishment is considered for consistent offenders and where attempts at reformation have failed. Indeed, the Court is bound by the *Children's Court Act 1958* to give primary consideration to reformation. "The Court shall firstly have regard to the welfare of the child."

The most important method of dealing with a child is by releasing him on probation for a period not exceeding three years. Most terms of probation are for twelve months. A Probation Officer is expected to assist and guide the child during that period with reformation and rehabilitation as the goal.

Probation Officers also assist the Court by furnishing reports on children's backgrounds. More Stipendiary Probation Officers are now being appointed to supplement the large number of Honorary Probation Officers throughout the State. Some Honorary Probation Officers are employed by the churches.

As a last resort children under fifteen years may be admitted to the care of the Social Welfare Department and those fifteen or over may be ordered detention in a Youth Training Centre for periods up to two years.

The *Social Welfare Act 1960* has vested in the Youth Parole Board the authority to parole children who are serving periods of detention.

Allied to the Children's Court is the Children's Court Clinic which is staffed by a team of psychiatrists, psychologists, and social workers. The Clinic undertakes detailed investigations of problem cases referred to it by the Court and makes recommendations on its findings. In some cases the Clinic will offer counsel to parents and children after a court appearance.

Court proceedings are closed to the press and general public.

The number of cases prosecuted by the Victoria Police, excluding cases of neglected children and drunkenness, and summarily disposed of by the Children's Courts for the years 1968 and 1969 are given in the following tables :

**VICTORIA—CHILDREN'S COURTS: CASES SUMMARILY DISPOSED OF :
NUMBER OF CHARGES AND NATURE OF OFFENCE**

Nature of offence	1968			1969		
	Males	Females	Total	Males	Females	Total
Against the person	487	11	498	569	13	582
Against property	7,354	315	7,669	8,929	411	9,340
Fraud, forgery, and false pretences	70	12	82	117	19	136
Against good order	652	28	680	710	28	738
Driving offences	469	6	475	656	3	659
Miscellaneous offences (a)	225	21	246	183	19	202
Total	9,257	393	9,650	11,164	493	11,657

(a) Breaches of Acts of Parliament and by-laws of statutory bodies, escaping from legal custody, breach of bond or probation, etc.

**VICTORIA—CHILDREN'S COURTS: CASES SUMMARILY DISPOSED OF :
NUMBER OF CHARGES: NATURE OF OFFENCE AND RESULT OF
HEARING, 1969**

Nature of offence	Result of hearing					
	Dis- missed, with- drawn, etc.	Otherwise dealt with				
		Fined	Placed on probation	Social Welfare Depart- ment (a)	Ad- jour- ned without probation	Other
Against the person—						
Assault and grievous bodily harm	105	62	67	54	48	3
Sex offences	27	3	103	40	64	6
Total	132	65	170	94	112	9
Against property—						
Robbery	5	1	14	9	..	..
Breaking and entering	96	27	1,530	1,309	567	28
Larceny (excluding motor vehicles)	159	138	1,299	649	883	27
Motor vehicles (larceny and illegal use)	77	82	696	629	401	25
Wilful damage	39	67	106	27	94	2
Other offences against property	27	10	165	54	93	5
Total	403	325	3,810	2,677	2,038	87
Fraud, forgery, and false pretences	..	3	70	46	17	..
Against good order—						
Indecent behaviour, etc.	9	1	48	8	36	..
Other offensive behaviour	25	40	12	4	40	3
Obscene and insulting language	7	36	19	3	21	3
Firearms	14	33	21	11	62	3
Other offences against good order	43	45	68	41	76	6
Total	98	155	168	67	235	15
Driving offences	35	183	174	115	139	13
Miscellaneous offences (b)	16	25	27	102	31	1
GRAND TOTAL	684	756	4,419	3,101	2,572	125

(a) Includes "admitted to care" and "placed in custody" of the Social Welfare Department.

(b) Breaches of Acts of Parliament and by-laws of statutory bodies, escaping from legal custody, breach of bond or probation, etc.

VICTORIA—CHILDREN'S COURTS: CASES SUMMARILY DISPOSED OF:
NUMBER OF CHARGES AND RESULT OF HEARING

Result of hearing	1968			1969		
	Males	Females	Total	Males	Females	Total
Fined	619	19	638	742	14	756
Placed on probation	3,515	204	3,719	4,187	232	4,419
Admitted to Social Welfare Department	1,342	43	1,385	1,686	53	1,739
Sentenced to youth training centre	1,236	5	1,241	1,341	21	1,362
Adjourned without probation	1,870	95	1,965	2,429	143	2,572
Other	157	8	165	123	2	125
Total convictions	8,739	374	9,113	10,508	465	10,973
Dismissed, withdrawn, struck out	518	19	537	656	28	684
Total	9,257	393	9,650	11,164	493	11,657

Warning juvenile first offenders

A system for warning juvenile first offenders operates in Victoria to prevent many children from having to make an appearance in a juvenile court. Police are instructed not to proceed against children who have committed minor offences, if an alternative course of action is available. Warnings are given in the presence of parents or a guardian, who are told of the probable underlying reason for the offence, and both the offender and his parents or guardian are expected to ensure the avoidance of a repetition.

Offenders are not normally given a second chance and divisional officers believe that only a very small proportion of those warned offend again. The reporting member continues to take an interest in the child until his future is assured, and in most cases co-operation is received from both the offender and his parents or guardian.

The following tables give details of police warnings during the years specified :

VICTORIA—POLICE WARNINGS

Offence group (a)	1966		1967		1968		1969	
	Males	Females	Males	Females	Males	Females	Males	Females
Assault (b)	10	..	12	..	8	..	14	..
Robbery and violence	3	..	..	..	..	..	..	..
Sex	34	..	46	1	24	1	41	1
Breaking and larceny (c)	908	253	896	254	945	299	1,113	359
Other offences	264	11	224	18	226	12	284	20
Total	1,219	264	1,178	273	1,203	312	1,452	380

(a) Based on Major Crime Index as prepared by the Victoria Police.

(b) Includes grievous bodily harm.

(c) Includes larceny and/or illegal use of a motor vehicle.

VICTORIA—POLICE WARNINGS : AGE OF OFFENDER, 1969

Offence group (a)		Age last birthday (years)					Total
		10 and under	11, 12	13, 14	15, 16	17 and over	
Assault (b)	M	..	..	7	6	1	14
	F	..	..	..	..	..	..
Robbery with violence	M	..	..	..	..	..	..
	F	..	..	..	..	..	..
Sex	M	..	5	14	16	6	41
	F	..	..	..	1	..	1
Breaking and larceny (c)	M	160	227	389	297	40	1,113
	F	18	45	154	124	18	359
Other offences	M	48	44	76	92	24	284
	F	3	6	5	6	..	20
Total		229	327	645	542	89	1,832

(a) Based on Major Crime Index as prepared by the Victoria Police.

(b) Includes grievous bodily harm.

(c) Includes larceny and/or illegal use of a motor vehicle.

Crime statistics

Magistrates' Courts

In the following tables details are given of the number of cases dealt with in Magistrates' Courts (known as Courts of Petty Sessions prior to 1970), excluding Children's Courts (details of which have been shown under that heading) and cases of a civil nature which are shown on page 569.

If one wishes to compare the figures in these tables with those relating to other States or countries, it is necessary that consideration be given to several points. The first is that the criminal law in the places compared be substantially the same; the second, that it be administered with equal strictness; and the third, that proper allowances be made for differences in the age and sex composition of the population.

Comparison with Victorian figures for earlier years may be affected by changes in the population structure in regard to sex and age, or by changes in the law. An amendment to the Justices Act, operative since February 1963, enables Magistrates' Courts to deal summarily with certain offences nominated in the amendment and previously dealt with by the higher courts. Also, improved methods of statistical collection were commenced in 1963. Accordingly, figures for Magistrates' Courts since 1964 are not comparable with those of previous years.

The following tables give details of the number of cases summarily disposed of in Magistrates' Courts for the years 1968 and 1969 :

**VICTORIA—MAGISTRATES' COURTS: ARREST CASES SUMMARILY
DISPOSED OF : NUMBER OF CHARGES AND NATURE OF OFFENCE**

Nature of offence	1968				1969			
	Convicted		Dismissed, withdrawn, or struck out		Convicted		Dismissed, withdrawn, or struck out	
	Males	Females	Males	Females	Males	Females	Males	Females
Against the person	2,144	44	1,072	16	2,428	80	1,163	24
Against property	8,764	1,254	907	87	10,195	1,211	1,155	126
Fraud, forgery, and false pretences	1,221	169	113	13	1,215	219	121	16
Against good order (a)	4,950	538	1,020	80	5,651	541	1,374	114
Driving offences	3,319	28	2,137	17	4,976	40	2,861	28
Miscellaneous (b)	967	102	117	12	1,352	93	178	15
Total	21,365	2,135	5,366	225	25,817	2,184	6,852	323

(a) This table excludes arrests for drunkenness. In 1968, 24,835 persons were charged with drunkenness; the corresponding figure for 1969 was 25,841. In most cases the result of hearing was a fine, with the alternative of imprisonment for default.

(b) Includes escaping from legal custody, offences concerning drugs, bribery, conspiracy, breach of bond or probation, etc.

**VICTORIA—MAGISTRATES' COURTS: ARREST CASES SUMMARILY
CONVICTED : NUMBER OF CHARGES AND RESULT OF HEARING**

Result of hearing	1968		1969	
	Males	Females	Males	Females
Fined	9,333	948	11,987	975
Imprisoned for—				
Under 1 month	1,200	125	1,399	104
1 month and under 6 months	4,011	101	4,417	141
6 months and under 12 months	904	18	943	22
1 year and over	273	2	320	2
Released on probation	1,626	222	1,847	273
Adjourned for a period without probation	956	145	1,288	181
Released on bond or recognisance	2,320	538	2,667	459
Other	742	36	949	27
Total	21,365	2,135	25,817	2,184

See footnotes to preceding table.

**VICTORIA—MAGISTRATES' COURTS :
SUMMONS CASES SUMMARILY DISPOSED OF :
NUMBER OF CHARGES AND NATURE OF OFFENCE**

Nature of offence	1968		1969	
	Convicted	Dismissed, with- drawn, struck out	Convicted	Dismissed, with- drawn, struck out
Against the person	1,170	995	1,212	1,195
Against property	3,279	1,249	3,608	1,382
Against good order	1,788	405	1,575	473
Driving offences	175,151	12,028	179,076	17,030
Miscellaneous (a)	53,482	7,130	47,547	9,997
Total	234,870	21,807	233,018	30,077

(a) Miscellaneous offences are generally breaches of State and Commonwealth Acts of Parliament.

NOTE. Details of the sex of offenders are not available for Magistrates' Courts summons cases.

Inquests

A coroner has jurisdiction to hold an inquest concerning the manner of death of any person who is slain or drowned or who dies suddenly or in prison or while detained in any mental hospital and whose body is lying dead within the district in which such coroner has jurisdiction.

His duties in relation to this are regulated by the Coroners' Acts and there are special provisions relating to inquests in other Acts, such as the Mines Act, Children's Welfare Act, and Registration of Births, Deaths, and Marriages Act. Coroners and deputy-coroners are appointed by the Governor in Council, every stipendiary magistrate being appointed a coroner for the State of Victoria. Deputy-coroners have jurisdiction in the districts for which they have been appointed. In addition, a justice of the peace has jurisdiction, within his bailiwick, to hold an inquest, but only if requested to do so by a police officer in charge of a station, or by a coroner.

In the majority of cases the coroner acts alone in holding an inquest, but in certain cases a jury is empanelled. This is done (a) when the coroner considers it desirable; (b) when in any specified case a law officer so directs; and (c) when it is expressly provided in any Act (as is the case under the Mines Act) that an inquest shall be taken with jurors. Amending legislation in 1953 provided that the viewing of the body is not essential and is necessary only when the coroner or jury deem it advisable.

When a person is arrested and charged before a justice or court with murder or manslaughter, those proceedings are adjourned from time to time pending the holding of the inquest. If the inquest results in a finding against that person of murder or manslaughter, the coroner issues a warrant committing him for trial, the other proceedings being then withdrawn.

The following table shows the number of inquest cases in Victoria of persons whose deaths were registered during the years 1966 to 1970, and the number of persons subsequently committed for trial :

VICTORIA—INQUEST CASES

Year	Inquests into deaths of—			Persons committed for trial		
	Males	Females	Persons	Males	Females	Persons
1966	1,510	833	2,343	44	3	47
1967	1,775	906	2,681	47	2	49
1968	1,635	766	2,401	31	5	36
1969	1,667	823	2,490	47	3	50
1970	1,805	832	2,637	45	5	50

The table below shows the charges on which persons were committed for trial by coroners during the years 1966 to 1970 :

VICTORIA—COMMITTALS BY CORONERS

Year	Murder			Manslaughter		
	Males	Females	Persons	Males	Females	Persons
1966	22	1	23	22	2	24
1967	30	2	32	17	..	17
1968	22	4	26	9	1	10
1969	17	2	19	30	1	31
1970	28	5	33	17	..	17

Higher courts

The tables which follow relate to distinct persons who have been convicted in the Supreme and County Courts in Victoria in the years shown. In cases where a person was charged with more than one offence, the principal offence only has been counted.

VICTORIA—HIGHER COURTS: AGES OF PERSONS CONVICTED

Age group (years)	1968			1969		
	Males	Females	Persons	Males	Females	Persons
Under 19	369	12	381	369	11	380
20-24	591	22	613	541	19	560
25-29	242	12	254	216	15	231
30-34	145	7	152	157	8	165
35-39	116	14	130	111	3	114
40-44	81	5	86	92	6	98
45-49	72	5	77	68	5	73
50-54	47	1	48	21	2	23
55-59	25	2	27	23	1	24
60 and over	21	1	22	20	1	21
Total	1,709	81	1,790	1,618	71	1,689

**VICTORIA—HIGHER COURTS: NUMBER OF PERSONS CONVICTED OF
SPECIFIC OFFENCES**

Offence (a)	1968			1969		
	Males	Females	Persons	Males	Females	Persons
Against the person—						
Murder	5	..	5	6	..	6
Attempted murder	2	1	3	..	..	..
Manslaughter	6	2	8	13	2	15
Manslaughter with motor vehicle	1	..	1	10	1	11
Assault with grievous bodily harm	59	2	61	45	5	50
Assault	22	1	23	26	..	26
Carnal knowledge (under 16 yrs)	206	..	206	142	..	142
Carnal knowledge (16 and under 18 yrs)	5	..	5	13	..	13
Incest	17	1	18	15	..	15
Rape	34	..	34	23	..	23
Indecent assault on female	41	..	41	34	..	34
Indecent assault on male	23	..	23	31	..	31
Unnatural offences	32	..	32	49	..	49
Bigamy	3	..	3	3	1	4
Other offences against the person	12	2	14	21	5	26
Total	468	9	477	431	14	445
Against property—						
Robbery	87	2	89	112	4	116
Breaking and entering—						
Houses	238	9	247	214	9	223
Shops	72	..	72	85	2	87
Other	62	..	62	51	..	51
Larceny (excluding motor vehicles and cattle and sheep)	114	12	126	150	6	156
Illegal use and larceny of motor vehicles	86	1	87	77	..	77
Cattle and sheep stealing	27	2	29	23	..	23
Other offences against property	75	6	81	62	2	64
Total	761	32	793	774	23	797
Fraud, forgery, and false pretences	115	28	143	135	22	157
Other offences—						
Driving under the influence (b)	24	..	24	3	..	3
Dangerous, etc., driving (b)	66	1	67	6	..	6
Miscellaneous offences (c)	275	11	286	269	12	281
Total	365	12	377	278	12	290
GRAND TOTAL	1,709	81	1,790	1,618	71	1,689

(a) With the exception of murder, for which separate figures of attempted murder are shown, all offences include attempts.

(b) In March 1968 an amendment to the Motor Car Act classified some of these offences as summary offences which may be heard in Magistrates' Courts.

(c) Includes breach of bond, probation, etc.

**VICTORIA—HIGHER COURTS: PERSONS CONVICTED OF SPECIFIC
OFFENCES: RESULT OF HEARING, 1969**

Offence (a)	Result of hearing						
	Fined	Im- prison- ed twelve months and under	Im- prison- ed over twelve months	Death sen- tence (b)	Sen- tence sus- pended on enter- ing a bond	Placed on pro- bation	Total
Against the person—							
Murder	..	..	..	4	..	..	6
Attempted murder	..	..	..	..	..	..	..
Manslaughter	..	..	11	..	1	..	15
Manslaughter with motor vehicle	3	2	2	..	1	..	11
Assault with grievous bodily harm	3	6	18	..	10	7	50
Assault	5	4	4	..	6	6	26
Carnal knowledge (under 16 years)	1	16	11	..	68	42	142
Carnal knowledge (16 and under 18 years)	..	3	1	..	6	3	13
Incest	..	..	12	..	1	2	15
Rape	..	3	16	..	..	2	23
Indecent assault on female	..	7	11	..	10	2	34
Indecent assault on male	1	4	7	..	14	4	31
Unnatural offences	2	10	11	..	14	11	49
Bigamy	..	..	..	..	4	..	4
Other offences against the person	..	6	9	..	4	6	26
Total	15	61	113	4	139	85	445
Against property—							
Robbery	..	10	66	..	9	20	116
Breaking and entering—							
Houses	2	72	37	..	33	54	223
Shops	..	17	32	..	15	19	87
Other	1	17	18	..	7	7	51
Larceny (excluding motor vehicles and cattle and sheep)	2	38	27	..	59	22	156
Illegal use and larceny of motor vehicles	1	17	11	..	20	18	77
Cattle and sheep stealing	..	10	..	..	12	..	23
Other offences against property	1	13	11	..	25	13	64
Total	7	194	202	..	180	153	797
Fraud, forgery, and false pretences	4	47	17	..	65	21	157
Other offences—							
Driving under the influence	3	..	..	..	..	..	3
Dangerous, etc., driving	4	..	..	..	1	..	6
Miscellaneous offences (c)	18	94	30	..	82	38	281
Total	25	94	30	..	83	38	290
GRAND TOTAL	51	396	362	4	467	297	1,689

(a) With the exception of murder, for which separate figures of attempted murder are shown, all offences include attempts.

(b) The death sentence has not been carried out in Victoria since 1967.

(c) Includes breach of bond, probation, etc.

**VICTORIA—HIGHER COURTS: AGES OF PERSONS CONVICTED OF SPECIFIC
OFFENCES, 1969**

Offence (a)	Persons convicted—Age group (years)						
	17 and under	18–19	20–24	25–29	30–34	35–39	Total
Against the person—							
Murder	..	..	1	3	1	1	6
Attempted murder	..	..	..	..	..	..	..
Manslaughter	..	2	4	4	1	1	15
Manslaughter with motor vehicle	..	2	4	3	..	1	11
Assault with grievous bodily harm	..	5	19	14	2	4	50
Assault	1	4	11	6	1	1	26
Carnal knowledge (under 16 years)	6	62	56	7	4	3	142
Carnal knowledge (16 and under 18 years)	..	..	8	4	..	..	13
Incest	..	1	..	..	1	..	15
Rape	..	5	12	2	3	1	23
Indecent assault on female	2	4	5	4	3	4	34
Indecent assault on male	..	1	5	7	5	4	31
Unnatural offences	3	10	12	6	3	4	49
Bigamy	..	..	..	1	1	1	4
Other offences against the person	..	4	12	1	2	1	26
Total	12	100	149	62	27	26	445

VICTORIA—HIGHER COURTS: AGES OF PERSONS CONVICTED OF SPECIFIC OFFENCES, 1969—continued

Offence (a)	Persons convicted—Age group (years)							Total
	17 and under	18-19	20-24	25-29	30-34	35-39	40 and over	
Against property—								
Robbery	5	24	46	14	11	10	6	116
Breaking and entering—								
Houses	17	62	74	23	22	7	18	223
Shops	1	19	31	15	12	3	6	87
Other	3	7	17	12	5	3	4	51
Larceny (excluding motor vehicles and cattle and sheep)	4	25	37	22	23	18	27	156
Illegal use and larceny of motor vehicles	3	27	30	8	5	1	3	77
Cattle and sheep stealing	..	1	11	3	7	..	1	23
Other offences against property	4	10	19	5	6	3	17	64
Total	37	175	265	102	91	45	82	797
Fraud, forgery, and false pretences	2	7	33	29	20	17	49	157
Other offences—								
Driving under the influence	..	1	1	..	..	1	..	3
Dangerous, etc., driving	..	1	1	1	..	2	1	6
Miscellaneous offences (b)	4	41	111	37	27	23	38	281
Total	4	43	113	38	27	26	39	290
GRAND TOTAL	55	325	560	231	165	114	239	1,689

(a) With the exception of murder, for which separate figures of attempted murder are shown, all offences include attempts.

(b) Includes breach of bond, probation, etc.

VICTORIA—HIGHER COURTS: NUMBER OF PERSONS CONVICTED: RESULT OF HEARING

Result of hearing	1968			1969		
	Males	Females	Persons	Males	Females	Persons
Fined	117	3	120	50	1	51
Imprisoned—						
Under 3 months	54	4	58	47	3	50
3 months and under 6	85	1	86	74	4	78
6 months and under 12	150	4	154	141	7	148
12 months	98	3	101	119	1	120
Over 12 months and under 2 years	115	..	115	76	2	78
2 years and over	244	5	249	276	8	284
Death sentence (a)	5	..	5	4	..	4
Placed on probation	230	14	244	278	19	297
Released on recognisance or bond	489	45	534	441	26	467
Other	122	2	124	112	..	112
Total	1,709	81	1,790	1,618	71	1,689

(a) The death sentence has not been carried out in Victoria since 1967.

Licensing legislation

After nearly one hundred years operation of the system of Licensing Magistrates or of the Licensing Court, the Licensing Act was repealed and the Licensing Court abolished by the *Liquor Control Act* 1968, which came into force on 1 July 1968. This Act incorporated a number of recommendations of the Royal Commission of Inquiry on Liquor in Victoria.

The Licensing Court of three members was replaced by the Liquor Control Commission of four members, the Chairman being a County Court Judge. Numerous alterations were made in the licensing law and practice of the State, the new Act completely re-writing the law. All fees taken under the new Act and all fines, penalties, forfeitures, and moneys incurred or accruing under it are paid into the Licensing Fund into which was also paid the amount standing to the credit of the Licensing Fund established under the *Licensing Act* 1958. A completely new code of compensation payable to owners and occupiers of licensed premises deprived of licences is set out in the Act, and provision is made for all payment of compensation out of the Licensing Fund, as well as all costs incurred in connection with the administration of the Act. Where the moneys remaining in the Licensing Fund on 30 June in any financial year are greater than the moneys therein on 1 July in that financial year, the surplus is to be transferred into the Consolidated Revenue.

VICTORIA—LICENSING FUND: REVENUE AND EXPENDITURE
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
REVENUE					
Licences, certificates, and permits	8,031	8,960	9,710	10,595	11,335
Interest on investments	20	20	20	20	20
Fees and fines	67	66	77	67	66
Total	8,118	9,046	9,807	10,682	11,421
EXPENDITURE					
Annual payments to municipalities	111	111	111	(a)	(a)
Compensation	5	3	12	19	336
Transfer to Police Superannuation Fund	46	46	46	(a)	(a)
Salaries, office expenses, etc.	308	322	363	388	426
Transfer to revenue	7,648	8,563	9,276	10,275	10,658
Total	8,118	9,046	9,807	10,682	11,421

(a) Under the Liquor Control Act, which came into force on 1 July 1968, annual payments to municipalities and to the Police Superannuation Fund are no longer made from the Licensing Fund.

VICTORIA—NUMBER OF LIQUOR LICENCES

Type of licence	At 30 June—				
	1966	1967	1968	1969	1970
Hotel	1,548	1,539	1,541	1,517	1,494
Registered club	293	301	309	325	347
Retailed bottled liquor	511	531	552	587	626
Wholesale liquor merchant	65	65	67	71	93
Australian wine	28	25	18	20	19
Railway refreshment room	17	17	15	15	15
Vigneron	10	9	9	9	12
Brewer	6	7	7	7	6
Restaurant	90	94	105	136	157
Cabaret	..	..	2	7	9
Ship	..	..	..	1	1
Theatre	..	..	..	..	1
Total	2,568	2,588	2,625	2,695	2,780

Racing legislation

The *Racing Act* 1958 regulates horse and pony racing and trotting, and dog racing. Under the Act the control of trotting and dog racing is vested in the Trotting Control Board and the Dog Racing Control Board, respectively.

Additional legislation, relating to totalisators and the Totalizator Agency Board, is found in the *Racing (Totalizators Extension) Act* 1960. Also, the *Stamps Act* 1958 contains provisions relating to the registration fees of bookmakers and bookmakers' clerks, and to the duty payable on betting tickets.

The following table gives details of horse racing and trotting meetings conducted during the years ended 31 July 1966 to 1970 :

VICTORIA—RACING AND TROTTING MEETINGS

Particulars	Year ended 31 July—				
	1966	1967	1968	1969	1970
RACING					
Number of meetings—					
Metropolitan courses	65	65	66	70	70
Other courses	342	358	356	361	368
Number of events—					
Metropolitan courses	494	490	507	533	533
Other courses	2,334	2,443	2,481	2,499	2,660
Amount of stakes—					
Metropolitan courses (\$'000)	1,967	1,957	2,023	2,226	2,524
Other courses (\$'000)	1,089	1,158	1,228	1,257	1,457
TROTTING					
Number of meetings—					
Metropolitan courses	37	37	37	36	37
Other courses	189	188	187	200	201
Number of events—					
Metropolitan courses	259	272	259	252	259
Other courses	1,427	1,419	1,423	1,568	1,632
Amount of stakes—					
Metropolitan courses (\$'000)	440	482	468	461	596
Other courses (\$'000)	438	463	516	562	641

Victoria Police

The functions of the Victoria Police Force can be broadly set out as the preservation of the Queen's Peace, the protection of life and property, and the prevention and detection of crime.

Recruitment

The Force is endeavouring to maintain a ratio of one policeman to every 700 population, although the figure in 1970 was 1 : 718. To maintain recruitment, cadetships are offered to youths between the ages of 16 and 18½ years, who are sworn in as constables with others who are recruited between the ages of 18½ and 35 years. All recruits serve a probationary period of one year before their appointments to the Force are confirmed.

Traffic

About 70 per cent of the work of the Police Force is concerned with the supervision of traffic. Registration of motor cars, testing drivers for licences, enforcing the Traffic Regulations and the Motor Car Act, and

checking of vehicle road-worthiness are all performed by the police. During the 12 months ending 31 December 1970, 34,583 accidents came under the notice of the police, 1,061 persons were killed in traffic accidents, and there were 23,737 casualties.

Traffic offences detected totalled 337,386, and the patrolling and checking of motorists by police resulted in the detection of persons wanted for other types of offences on many occasions. The average annual increase of over 6 per cent in accidents occurred again in 1969-70.

During 1970, 326 mobile traffic section members using 89 motor cars and 100 motor cycles checked 99,685 vehicles, made 13,862 amphotometer bookings for speed infringements, and travelled 2,807,570 miles for an average of 260 days duty on the road and 6.6 days in courts. They operated throughout the State, many from country centres.

Breath Analysis Section

The nineteen members of this Section interviewed 5,414 drivers suspected of being under the influence of intoxicating liquor or drugs in 1970, and as a result, charged 873 with driving under the influence, and 3,779 with driving while having a blood alcohol content over 0.05 per cent.

Criminal Investigation Branch

Representing about 10 per cent of the Force, the Criminal Investigation Branch is composed of detectives drawn from the uniformed force. They must, currently, have at least six years police service, and have passed the examination for promotion to the rank of Senior Constable, before being eligible to join the Branch. They are then trained at the Detective Training School.

Certain detectives specialise in inquiries for which special squads have been formed. These include homicide, drug, company, and arson squads, manned by men who have special aptitude in the respective fields. Detectives are used on interchange duty between other States in Australia and in New Zealand.

Communications

Police received just under 0.75 million calls from the public during 1970, all handled by the control centre called D.24. This section recovered over 2,572 stolen vehicles, made 15,588 arrests, and questioned 75,020 suspects.

The control room staff is being increased regularly and all directing personnel are now sub-officers. Telex messages were exchanged regularly with all State capitals and overseas countries. The Victoria Police is also the Australian headquarters for Interpol. Forty larger country police stations are now connected with D.24 by two-way radios, all of which are usable for communication direct to police cars.

As part of the State Disaster Organisation, police co-ordinate fire, ambulance, and airport resources in times of flood, bushfire, or other large scale emergencies.

Training

Primary training of Victoria Police recruits (as distinct from cadets) consists of twenty weeks at the Police Depot learning law, English, social studies, physical training, combat, drill, firearms, first aid, and swimming. Secondary classes are in detective training at the Detective Training School

where members are given ten weeks' instruction in the latest scientific methods, and at the Sub-Officers' Training School, where law, prosecutions, and personnel management are taught. Other spheres for secondary training are at the Motor Cycle Riders School, Traffic School, Motor Driving School, and individual specialist training is also provided for fingerprint experts and for members of the Forensic Science Laboratory.

The Victoria Police Detective Training School and the Airlie Officers College attract police officers from south-east Asian countries and Africa.

The Airlie Officers College teaches administration, social studies, and human relations to those about to be promoted to officer rank with a view to fitting them for administrative posts.

Motor Registration Branch

Motor Registration Branch business continued to increase in 1970-71. Transactions dealt with by the Branch were 4,711,923 in 1970-71 and collections amounted to \$104m in the same period.

The following statement shows the authorised and actual strengths of the Victoria Police, and the actual strength of certain sections of the Force on the dates shown :

VICTORIA—POLICE FORCE

Particulars	At 30 June—				
	1966	1967	1968	1969	1970
Authorised strength	4,572	4,620	4,731	4,781	4,823
Actual strength (a)	4,402	4,577	4,687	4,743	4,739
C.I.B., etc. (b)	644	649	657	666	653
Police-women	61	61	64	70	71
Cadets	127	134	138	176	184
Reservists	119	106	84	61	59
Number of inhabitants per active police officer (c)	704	699	698	714	718

(a) Includes police-women, but excludes cadets and police reservists.

(b) Criminal Investigation Bureau, plainclothes police, and scientific section.

(c) Includes police-women but not police reservists.

Further references, 1961-71

HOUSING AND BUILDING

Building development in the City of Melbourne, 1970

The year ended 30 September 1970 was noteworthy for the fact that only one major building was completed in the Central Business District of Melbourne. This was the property at 468-478 Collins Street. The application for the permit stated the cost to be \$3m.

On the other hand, while the 758 applications for permits to erect new buildings or carry out alterations and/or additions to existing buildings was approximately the same as in 1969 (769), the values rose to an all-time record of almost \$114m. A large portion of the increase has been due to the approval of high-rise hotel-motel complexes, particularly in the eastern and northern sectors of the city. Commercial development continues to spread mainly to the west and north from the Collins-Queen Street area.

There has been considerable flat development in North Melbourne and Carlton, mainly by the Victorian Housing Commission and the Master Builders (Redevelopment) Pty Ltd, and in Parkville, East Melbourne, and South Yarra by private enterprise. Nearly all the latter are own-your-own units on a strata title basis. The first ventures into residential units in the city proper—201 Spring Street and 287-293 Exhibition Street have seemingly proved less popular than anticipated.

The following is a list of major buildings in course of erection as at 30 September 1970 as supplied by the City of Melbourne :

Owner	Location	Estimated cost
		(\$m)
A.M.P. Society	174-92 Exhibition Street	5.0
Artagan Investments Pty Ltd	10-16 Queen Street	1.8
Australia Netherlands Properties Pty Ltd	562-76 Bourke Street	7.0
B.H.P. Co. Ltd	Cnr William and Bourke Streets	15.0
Bevelon Investments Pty Ltd	235-51 Bourke Street	3.0
Carlton Brewery Ltd	184-208 Victoria Street	2.0
15 Collins Street	13-15 Collins Street	1.4
500 Collins Street	500-4 Collins Street	6.2
Commercial Banking Co. of Sydney Ltd	251-7 Collins Street	1.5
Commonwealth Banking Corporation	14-26 Elizabeth Street	(Stage 1) 3.0
Eagle Star Insurance Co. Ltd	473-81 Bourke Street	2.8
Eva Pty Ltd	131-7 Lonsdale Street	3.0
Inship Pty Ltd	352-8 Collins Street	3.1
Latle Finance Pty Ltd	303 Royal Parade	1.0
Mutual Life and Citizens Insurance Society Ltd	303-7 Collins Street	6.6
Ralton Holdings Pty Ltd	194-200 Bourke Street	(Stage 1) 1.3
Treasury Gate Pty Ltd	97-9 Spring Street	2.5

Division of Building Research—Commonwealth Scientific and Industrial Research Organization

The Division of Building Research had its origin in the appointment in December 1944 of an Officer-in-Charge of Building Materials Research. In 1948, following a report by a former Director of Building Research in Britain, activities were no longer confined to materials and its charter was extended to include all fields of research relevant to building. In 1950 the research team was raised to the status of the Division of Building Research which was one of many building research establishments throughout the world set up towards the end of the Second World War.

The laboratories have been located at Highett, Victoria, since early in 1946 when they took possession of an aircraft engine repair shop vacated by the Department of Aircraft Production. Although this was intended to be only temporary accommodation it has continued in use, with very considerable internal modification. Additions have been made in the form of acoustic test chambers for reverberation and transmission measurements, an anechoic chamber, and more recently a structural testing laboratory with a strong floor.

In 1970 the Division had a professional staff of sixty-four included in a total of 126 and its annual expenditure exceeded \$1m of which 7 per cent comes from private industry, State, and semi-government organisations in the form of donations or research contracts. In 1963 a small measure of decentralisation was taken with the establishment of a branch office in Port Moresby in the Territory of Papua New Guinea.

Many of the senior staff of the Division were appointed when research activities were confined to materials and this has influenced the pattern of research so that even now materials research takes 45 per cent of the annual expenditure. From a study of materials evolved studies of the use of materials in the disciplines concerned with design and construction, namely, structural engineering, acoustics, thermal behaviour, and roof drainage. Later studies of the design of buildings showed the need for further studies in a broader field of planning, and this led to the establishment in 1963 of a group concerned with building operations and economics and, in 1968, of a systems research group concerned mainly with the techniques and methodology of planning by means of computers.

The current range of activities in the Division is shown in the following table with the number of staff presently engaged in each major category :

Section	Number of staff	Fields of interest
Materials	37	Concrete, gypsum, clays, ceramics, metals, glass, paint, plastics, bitumen, stone
Engineering and design	16	Acoustics, thermal studies, structures, roof drainage, fire
Planning	18	Operations, economics, systems
Information, editorial, library	8	
Administrative services	47	Technical services, workshops

In addition to the research sections, the table includes the administrative services and an information group. The latter is responsible for answering the majority of the 8,000 or more inquiries now handled each year by the Division. These inquiries come from a wide range of persons associated with building, government departments and agencies, engineers, architects, builders, suppliers, and private individuals.

The following list summarises the work done by the Division since 1944, showing the various achievements.

Materials

Methods of manufacturing lightweight aggregate for concrete : determination of the properties of lightweight concrete.

Cheap and effective methods of curing concrete masonry : an extensive range of new ceramic products.

High density gypsum : greatly improved methods of manufacturing fibrous plaster.

Elimination of staining on painted surfaces : mould-resistant paints.

Causes and prevention of cracking of glass : effective use of jointing materials and sealants.

Great improvement in the performance of bituminous membranes and in the durability of bituminous roads.

Design and construction

Method of calculating the deflection of reinforced concrete structures : methods of designing concrete floors to prevent excessive deflection.

Pioneering the use in Australia of digital electronic computers for the analysis of multi-storey frameworks.

Method for determining the optimum stripping time of concrete floors. Discovery that the long-term expansion of clay bricks is a major cause of cracking in buildings.

Finding that concrete floors on the ground do not deleteriously affect human comfort : model techniques for study of static and dynamic characteristics. New techniques for determining acoustic properties of materials : sound reinforcement systems for reverberant or large spaces.

Greatly improved methods of calculating temperatures within buildings and also air-conditioning loads : detailed solar position and radiation tables for a large number of locations in Australia and elsewhere.

Optimisation of house insulation for different climatic conditions : preferred internal environmental conditions in the tropics.

Planning

Cheap and efficient computer programmes for planning and analysis of building projects by critical path analysis : demonstration that the successful use of critical path analysis can result in an overall saving in construction time of 30 per cent.

Definition of the conditions under which critical path techniques for coordination and control can be successfully applied : data on the actual time of completion cost of buildings, compared with the specified figures.

Establishment for the benefit of clients, designers, and builders of realistic standards of performance on cost, time of completion, and the incidence and magnitude of variations.

Computer programmes for the rapid production of architectural and engineering drawings, including perspectives : optimal design criteria and techniques for plate, shell, and frame structures.

General techniques for optimal planning and design : methods of optimising the design of buildings, bridges, and roads.

Methods of determining the optimal layout of hospitals : methods of optimising land use in urban planning.

Members of the scientific staff take part in promoting and disseminating the results of research ; as well as the conventional form of publication in Divisional Reports, technical and scientific journals, the Division also publishes several series of notes. All publications are available on request. *Ready Research References*, published every three months, summarises work done on different projects in concrete and structures. *Tropical Building Research Notes* are prepared by the Port Moresby Office of the Division and circulated mainly in the Territory. *Building Briefs* are prepared once a month for publication in building trade journals in each State and represent an information series, not confined exclusively to subjects on which research has been done. *Fibrous Plaster Notes* are another series circulated among members of the Fibrous Plaster Manufacturers Association.

Officers also take part in the activities of the Standards Association of Australia. The Chief of the Division is a member of the Building Industry

Standards Committee and the Division is represented on thirty-two Technical Committees of the SAA.

Every five years the Division displays its work for two or three days and invites all who are interested in building. An Australian Building Research Congress is held every three years. The Division organised the first in 1961 and subsequently has alternated responsibility with the Commonwealth Experimental Building Station in Sydney.

Further references 1961-71; Development of architecture in Victoria, 1962; Building trends since 1945, 1963; Developments in building methods since 1945, 1964; Building materials, 1966; Redevelopment of the inner residential areas, 1967; Early building in Victoria, 1968; Housing for aged persons, 1969; Building trends in Melbourne since 1961, 1970; Bridges in Victoria, 1971

Supervision and control of building

The *Town and Country Planning Act* 1961 and the *Local Government Act* 1958 provide regulations for the preparation of planning schemes and the uniform control of building operations throughout Victoria. In general, the administration of the provisions of these Acts is carried out by councils of the local government authorities in the areas to which they apply.

Town and country planning

Statutory town and country planning was first introduced into Victoria by the passing of the *Town and Country Planning Act* 1944. A major consolidation and amendment of the legislation occurred in 1961. This principal Act was substantially amended early in 1968 to include the following :

1. to increase the membership of the Town and Country Planning Board from three to four ;
2. to increase the Board's responsibilities, including the preparation of statements of planning policy ;
3. to set up a State Planning Council ;
4. to provide for the establishment of regional planning authorities ;
5. to provide for a tribunal to hear and determine town planning appeals ;
6. to extend the metropolitan planning area and define more satisfactorily the relationship for planning between the Melbourne and Metropolitan Board of Works as the metropolitan planning authority and metropolitan councils ; and
7. to improve the provision of the 1961 Act in the light of experience gained since its inception.

Statements of planning policy

Statements of planning policy provide physical planning authorities with a predetermined, co-ordinated outline of government policy as the basis for the formulation of detailed planning proposals. They are prepared by the Board, in consultation with the State Planning Council, and to be effective they must be approved by the Governor in Council. Every responsible authority, including regional planning authorities, in preparing or amending a planning scheme, must have due regard to any approved statement of planning policy which affects its planning area. During 1970 statements were approved for Western Port and the Mornington Peninsula. Statements for the Dandenongs, the Yarra River, and Bellarine Peninsula were in course of preparation.

State Planning Council

The State Planning Council, inaugurated on 17 October 1968, comprises the Chairman, Town and Country Planning Board (Chairman), the Chairman, State Rivers and Water Supply Commission, the Chairman, Country Roads Board, the Chairman, State Electricity Commission, the Chairman, Victorian Railways Commission, the Secretary to the Premier's Department, the Secretary for Public Works, the Chairman, Housing Commission of Victoria, the Chairman, Melbourne and Metropolitan Board of Works, the Chairman, Land Conservation Council, the Under-Secretary, and the Director-General of Education.

Its functions are :

1. to co-ordinate planning by State instrumentalities and semi-government authorities of future works and developments for which they are responsible ; and
2. to act as consultant and adviser to the Town and Country Planning Board with respect to the preparation and adoption of any statement of planning policy.

In effect the authorities represented on the Council, while continuing to be responsible for planning and execution in their own specialised fields, become direct participants in broad policy planning at government level.

Regional planning authorities

Under the amending Act a regional planning authority may be established to prepare a planning scheme for any specified area extending beyond the boundaries of any one municipality and to enforce and carry out that scheme. A regional planning authority shall consist of representatives of every municipality within the region and may also include other approved specially qualified people. It shall be financed by the participating municipalities on an agreed basis and shall be a body corporate with powers to acquire and dispose of land. It has the power to appoint its own staff and technical advisory committees and it can become the sole responsible authority for any interim development order or planning scheme in operation in the region. It can also delegate to the council of a municipality within the region such powers as it thinks fit and are capable of being delegated.

The two regional planning authorities described below have already been established under the Act.

Western Port Regional Planning Authority

On 25 February 1969 the Governor in Council approved the establishment of the Western Port Regional Planning Authority. This covers 648 sq miles and includes the Shires of Flinders, Hastings, Mornington, and Phillip Island, the Parish of French Island, that part of the Shire of Cranbourne outside the extended metropolitan planning area, and part of the Shire of Bass. The Authority consists of two representatives from each council in the region. It has appointed staff and has started the studies necessary for the preparation of a regional plan. It has also appointed four technical committees—Industrial Development, Tourism and Recreation, Conservation, and Pollution—to advise it on methods of maintaining a balanced environment.

Geelong Regional Planning Authority

The establishment of the Geelong Regional Planning Authority was approved on 22 April 1969. The region includes the Cities of Geelong,

Geelong West, and Newtown, the Shires of Bannockburn, Barrabool, Bellarine, Corio, and South Barwon, and the Borough of Queenscliffe. This is an area of 973 sq miles. The Authority consists of two representatives from each council in the region. It has formally resolved to prepare a regional planning scheme and as a first step it has conducted a study into the amount of work of regional significance that has already been undertaken by member councils. As a second step the Country Roads Board will conduct a transportation study for the present and future urban areas of Geelong.

The establishment of the Geelong authority completes the formation of the three regional planning authorities (including the Melbourne and Metropolitan Board of Works) concerned with the development of the Port Phillip district.

Preparation of planning schemes

The Town and Country Planning Board is also responsible for the preparation of planning schemes for special areas or projects of State significance where the local authority has not the necessary resources to undertake the task or where a unified approach is necessary and a regional planning authority is not appropriate. This applies particularly to coastal areas and to inland areas such as those with man-made lakes as a result of water conservation schemes.

Local Government Act

Under the *Local Government Act* 1958, Uniform Building Regulations provide for the uniform control of building operations in Victoria. Particulars relating to some of the powers and controls provided by these regulations may be found on page 327 of the *Victorian Year Book* 1961.

Building statistics

The statistics in succeeding pages deal only with the construction of buildings, as distinct from other construction such as railways, bridges, earthworks, water storage, etc. In the following tables, i.e., as from 1 July 1966, *all* alterations and additions valued at \$10,000 and over are included in the values stated. Prior to this date published data included such major alterations and additions only in respect of buildings *other* than houses. With the exception of the table relating to building approvals, particulars of minor alterations and additions are excluded, and in all tables particulars of renovations and repairs to buildings are excluded, because of the difficulty in obtaining complete lists of persons who undertake such operations. Figures for houses exclude converted military huts, temporary dwellings, flats, and dwellings attached to other new buildings.

Since the September quarter 1945 a quarterly collection of statistics of building operations has been undertaken, comprising the activities of all private contractors and government authorities engaged in the erection of new buildings, and owner-builders who erect buildings without the services of a contractor responsible for the whole job.

The bases of the collection are building permits issued by local government authorities, and contracts let or day labour work authorised by Commonwealth, State, semi-governmental, and local government authorities. As a complete list of government authorities and building contractors is maintained, details shown in succeeding tables embrace all local government areas. However, details for building approvals and owner-builders cover only those areas subject to building control by local government authorities, and exclude some rural areas not subject to permit issues.

The following definitions of terms used in the succeeding tables are necessary for an understanding of the data presented :

Building approvals. These comprise private permits issued by local government authorities together with contracts let or day labour work authorised by Commonwealth, State, semi-governmental, or local government authorities.

Private or government. Building is classified as private or government according to ownership at the time of commencement. Thus, building carried out directly by day labour or for government instrumentalities by private contractors, even though for subsequent purchase, is classed as government. Building carried out by private contractors for private ownership or which is financed or supervised by government instrumentalities but erected for a specified person is classed as private.

Owner-built. A building actually erected or being erected by the owner or under the owner's direction, without the services of a contractor who is responsible for the whole job.

Commenced. A building is regarded as having been commenced when work on foundations has begun. Owing to the difficulty of defining the exact point that this represents in building operations, interpretations made by informants may not be entirely uniform.

Completed. A building is regarded as having been completed when the building contractor has fulfilled the terms of the contract or, in the case of owner-built houses, when the house is either completed or substantially completed and occupied (the value shown in this case is that of the owner-built house as a finished project). As with commencements, the interpretation placed on this definition by informants may not be entirely uniform.

Under construction (i.e., unfinished). Irrespective of when commenced, and regardless of whether or not work has actually proceeded at all times, *once* a building has been commenced it continues to be shown in the tables as under construction (i.e., unfinished) until completed. Buildings on which work has been permanently abandoned are *excluded*.

Numbers. The numbers of houses, flats, and shops with dwellings attached, represent the number of separate dwelling units. Each flat in a block of flats is counted as a separate dwelling unit.

Values. All values shown exclude the value of the land and represent the estimated value of the buildings on completion.

Building approvals

The following table shows the value of private and government building approved in Victoria for the years 1966-67 to 1970-71 :

**VICTORIA—VALUE OF PRIVATE AND GOVERNMENT
BUILDING APPROVED
(\$'000)**

Year	Houses and flats	Other new buildings	Alterations and additions to buildings (a)	Total all buildings
1966-67	273,358	220,692	41,586	535,636
1967-68	309,080	207,259	41,469	557,808
1968-69	339,110	221,561	44,913	605,584
1969-70	364,916	319,218	47,788	731,922
1970-71	336,044	289,864	51,987	677,895

(a) Valued at \$10,000 or more.

In normal circumstances, information concerning building approvals is a primary indicator of building trends and gives some indication of the effect of varying economic conditions on the building industry. However, a complete comparison of buildings approved cannot be made against buildings commenced, as the relationship is affected by the fact that (a) some intended buildings are never begun, and new building plans may be re-submitted later, (b) estimated values recorded for building approvals may be affected by rising costs owing to delays in the commencement of buildings, and (c) as previously mentioned, building permits do not embrace the whole of the State.

Value of new buildings commenced

The following table shows the value of all new buildings commenced in Victoria, according to the type of building, for the years 1966-67 to 1970-71. The figures include all alterations and additions valued at \$10,000 and over. Renovations and repairs are excluded.

**VICTORIA—VALUE (WHEN COMPLETED) OF TOTAL NEW BUILDINGS
COMMENCED : CLASSIFIED BY TYPE
(\$'000)**

Type of building	1966-67	1967-68	1968-69	1969-70	1970-71
Houses	195,968	212,545	241,646	263,536	280,745
Flats	71,220	90,644	96,935	92,886	70,752
Shops	23,010	13,627	24,329	19,540	22,430
Hotels, guest houses, etc.	6,916	8,285	20,708	21,556	18,280
Factories	52,601	54,654	54,419	65,830	74,195
Offices	56,312	28,984	34,699	87,279	79,878
Other business premises	16,832	31,858	21,855	26,265	30,487
Educational	35,604	35,419	44,905	46,671	54,615
Religious	3,554	2,484	2,916	3,929	2,804
Health	15,646	9,538	14,660	29,210	13,923
Entertainment and recreation	7,714	7,501	7,205	8,453	8,806
Miscellaneous	24,515	9,325	11,728	9,434	15,121
Total	509,892	504,864	576,005	674,588	672,037

As with building approvals, increases in the value of buildings commenced are not wholly attributable to increased building activity, but are partly the result of an almost continuous rise in the cost of building. It should also be realised that, in any period, where there are appreciable increases in the value of buildings commenced for industrial, commercial, business, health, etc., purposes, this movement could be misinterpreted to some extent, as these buildings may include the commencement of large scale projects, the completion of which may be spread over several years.

Value of new buildings completed

The following table shows the value of all new buildings completed in Victoria, according to the type of building, for the years 1966-67 to 1970-71. Renovations, repairs, and minor alterations and additions are excluded.

VICTORIA—VALUE OF TOTAL NEW BUILDINGS COMPLETED:
CLASSIFIED BY TYPE
(\$'000)

Type of building	1966-67	1967-68	1968-69	1969-70	1970-71
Houses	203,556	208,097	230,420	261,899	278,109
Flats	55,958	80,541	90,085	101,953	85,717
Shops	21,810	16,701	21,284	23,808	17,956
Hotels, guest houses, etc.	5,103	7,965	6,490	16,283	22,762
Factories	66,199	55,096	56,137	67,104	69,174
Offices	46,420	48,716	53,390	35,638	62,714
Other business premises	16,198	13,493	21,370	33,186	34,985
Educational	26,968	37,140	42,029	39,781	43,591
Religious	3,262	3,518	3,188	3,108	3,695
Health	10,631	10,751	10,352	21,367	29,080
Entertainment and recreation	4,691	4,778	9,714	9,807	10,120
Miscellaneous	11,147	10,574	33,667	15,176	10,061
Total	471,943	497,370	578,126	629,109	667,966

Value of new buildings under construction (i.e., unfinished)

The value of all new building work remaining unfinished increased from \$514,808,000 at 30 June 1970 to \$520,378,000 at 30 June 1971.

Value of work done during period

The following table shows the estimated value of work actually carried out during each year 1966-67 to 1970-71. For any building the sum of these values obtained during its construction equals the value of the building on completion. The figures include estimates for the value of work done on owner-built houses. The increases in value of work done over the periods are not necessarily wholly attributable to increased building activity, but are partly the result of increases in the cost of building.

**VICTORIA—VALUE OF WORK DONE ON NEW BUILDINGS:
CLASSIFIED BY TYPE
(\$'000)**

Type of building	1966-67	1967-68	1968-69	1969-70	1970-71
Houses	202,166	211,611	233,502	265,058	281,327
Flats	63,752	81,592	99,709	99,721	79,254
Shops	19,387	18,764	18,917	22,536	17,829
Hotels, guest houses, etc.	5,413	7,869	10,137	21,493	21,055
Factories	58,953	59,446	55,157	66,137	70,758
Offices	48,343	41,849	48,879	45,903	72,527
Other business premises	15,216	21,108	30,879	34,402	33,099
Educational	29,053	40,202	42,040	43,172	50,814
Religious	3,674	3,072	3,119	3,347	3,193
Health	13,693	15,844	15,437	21,331	26,431
Entertainment and recreation	5,942	7,420	8,484	9,325	9,313
Miscellaneous	21,810	16,973	14,115	12,775	11,874
Total	487,402	525,750	580,375	645,200	677,474

NOTE. The above table includes partly estimated values for owner-built constructions where actual value of work done during the period was not available.

Number of new dwellings

The following table shows the number of new houses and individual flat units (excluding conversions to flats) commenced, completed, and under construction classified by geographical distribution and ownership for the years 1966-67 to 1970-71. Due to the new concepts used at the Census of 30 June 1966 for the delimitation of the boundaries of the Melbourne Metropolitan Area (see page 117), figures other than "State total", subsequent to 30 June 1966, are not comparable with those of earlier years.

**VICTORIA—NUMBER OF NEW HOUSES AND FLATS:
GEOGRAPHICAL DISTRIBUTION**

Year	Commenced		Completed		Under construction (i.e., unfinished) at end of period	
	Houses	Flats	Houses	Flats	Houses	Flats
MELBOURNE STATISTICAL DIVISION						
1966-67	14,899	11,174	15,448	9,372	6,478	6,649
1967-68	16,003	13,587	15,545	11,798	6,925	8,416
1968-69	17,829	13,121	17,085	12,885	7,511	8,567
1969-70	18,771	12,457	18,772	12,971	7,407	7,826
1970-71	19,095	9,201	19,290	11,105	7,125	5,705
REMAINDER OF THE STATE						
1966-67	6,191	813	6,678	766	3,945	574
1967-68	5,905	812	6,047	888	3,788	498
1968-69	5,752	996	5,646	890	3,779	591
1969-70	5,804	1,048	5,930	1,021	3,553	573
1970-71	5,676	1,111	5,889	982	3,243	693
STATE TOTAL						
1966-67	21,090	11,987	22,126	10,138	10,423	7,223
1967-68	21,908	14,399	21,592	12,686	10,713	8,914
1968-69	23,581	14,117	22,731	13,775	11,290	9,158
1969-70	24,575	13,505	24,702	13,992	10,960	8,399
1970-71	24,771	10,312	25,179	12,087	10,368	6,398

**VICTORIA—NUMBER OF NEW HOUSES AND FLATS:
CLASSIFIED BY OWNERSHIP**

Year	New houses and flats erected for—				Total houses and flats
	Government ownership (a)	Private ownership (a)			
		By contractors	By owner-builders	Total private	
COMMENCED					
1966-67	3,180	27,137	2,760	29,897	33,077
1967-68	2,321	30,936	3,050	33,986	36,307
1968-69	2,549	31,903	3,246	35,149	37,698
1969-70	3,208	31,649	3,223	34,872	38,080
1970-71	2,762	29,088	3,233	32,321	35,083
COMPLETED					
1966-67	3,488	25,799	2,977	28,776	32,264
1967-68	2,367	28,967	2,944	31,911	34,278
1968-69	2,251	30,914	3,341	34,255	36,506
1969-70	2,975	32,005	3,714	35,719	38,694
1970-71	3,085	30,720	3,461	34,181	37,266
UNDER CONSTRUCTION (i.e., UNFINISHED) AT END OF PERIOD					
1966-67	1,851	11,589	4,206	15,795	17,646
1967-68	1,804	13,519	4,304	17,823	19,627
1968-69	2,102	14,292	4,054	18,346	20,448
1969-70	2,326	13,561	3,472	17,033	19,359
1970-71	2,008	11,629	3,129	14,758	16,766

(a) See definitions on page 591.

Number of new houses

Particulars of the number of new houses, classified by the material of outer walls, commenced, completed, and under construction for the years 1966-67 to 1970-71 are shown in the following table :

**VICTORIA—NUMBER OF NEW HOUSES: CLASSIFIED BY
MATERIAL OF OUTER WALLS**

Year	New houses					
	Brick, concrete, and stone	Brick veneer	Wood	Asbestos- cement	Other	Total
COMMENCED						
1966-67	380	17,166	1,646	1,551	347	21,090
1967-68	516	18,343	1,346	1,494	209	21,908
1968-69	538	20,266	1,085	1,566	126	23,581
1969-70	642	21,126	937	1,797	73	24,575
1970-71	778	21,451	775	1,708	59	24,771
COMPLETED						
1966-67	419	17,805	1,913	1,614	375	22,126
1967-68	444	17,934	1,522	1,433	259	21,592
1968-69	531	19,228	1,218	1,594	160	22,731
1969-70	641	21,055	1,133	1,796	77	24,702
1970-71	716	21,678	862	1,864	59	25,179
UNDER CONSTRUCTION (i.e., UNFINISHED) AT END OF PERIOD						
1966-67	460	6,860	1,244	1,707	152	10,423
1967-68	533	7,252	1,059	1,769	100	10,713
1968-69	519	8,108	894	1,699	70	11,290
1969-70	551	8,088	638	1,651	32	10,960
1970-71	579	7,812	491	1,457	29	10,368

VICTORIA—NUMBER OF NEW HOUSES AND FLATS COMMENCED,
1961-62 TO 1970-71

For government instrumentalities, owner-builders, and private persons (or firms)

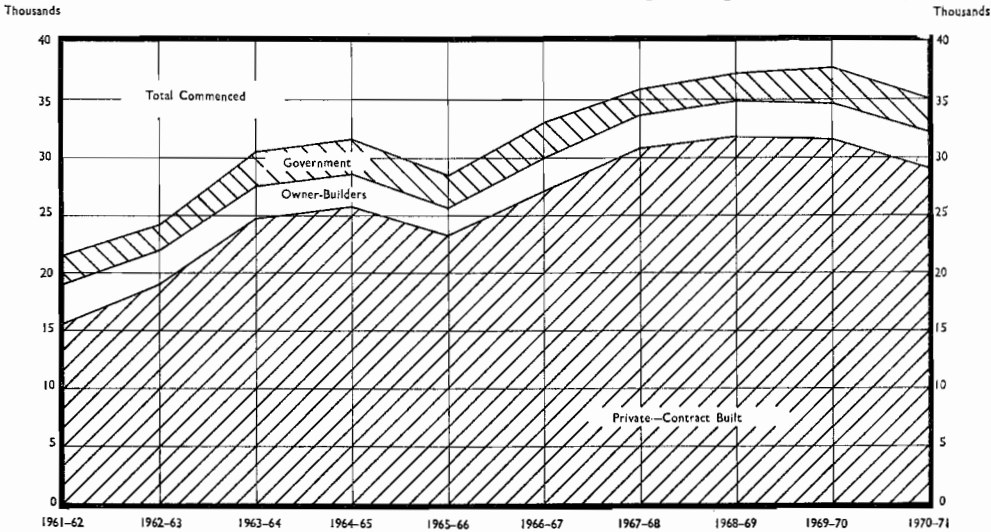


FIGURE 9. Graph showing number of new houses and flats commenced, classified according to ownership.

VICTORIA—PERCENTAGE NUMBER OF NEW HOUSES
COMMENCED BY KIND, 1961-62 TO 1970-71

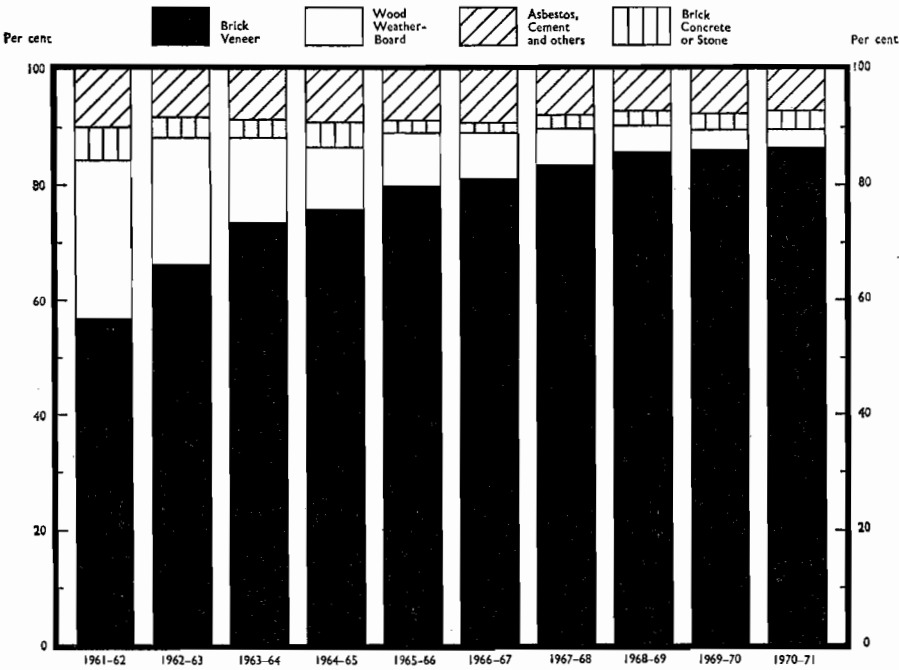


FIGURE 10. Graph showing percentage number of new houses commenced, classified according to materials of outer walls.

Government housing activities

Commonwealth authorities

Department of Housing

The principal functions of the Commonwealth Department of Housing include the administration of the Commonwealth-State Housing Agreements, the War Service Homes Act, the Home Savings Grant Act, the States Grants (Dwellings for Aged Pensioners) Act, and the Housing Loans Insurance Act under which the Housing Loans Insurance Corporation was established. It is also responsible for the provision, management, and maintenance of flats made available by the Commonwealth as transitory accommodation for migrant families.

Commonwealth-State Housing Agreements

Since 1945 the Commonwealth has entered into a series of Housing Agreements with the State of Victoria (and all other States) under which the Commonwealth advances loan funds to the State for the construction of dwellings primarily for families of low or moderate means. Advances were made under the first (1945) Agreement until 30 June 1956. A new Agreement (1956) came into effect as from 1 July 1956 and advances have continued to be made under this Agreement ever since, subject to minor amendments to its terms in 1961 and 1966.

The 1956-1966 Agreement requires the State to divide the advances of loan funds received from the Commonwealth each financial year into two parts. One part is to be used for the erection of dwellings by the State housing authority for rental or sale. The other part, which shall be not less than 30 per cent of the advances made, is to be used to provide loans for persons wishing to build or purchase a home privately through housing societies and other approved institutions. For the purpose of these loans the State is required to maintain a Home Builders' Account. Commonwealth advances of loan funds during 1969-70 (\$35.5m) were \$24.6m to the Housing Commission, Victoria, and \$10.8m to the Home Builders' Account.

In addition to the "new" loan moneys of \$10.8m, an amount of \$6.6m became available for lending from the Home Builders' Account during 1969-70 from surpluses resulting from the revolving nature of the Home Builders' Account. Co-operative terminating housing societies in Victoria were advanced \$15.9m from the Home Builders' Account during 1969-70.

Under the 1956-1966 Agreement the Commonwealth may also require the State to set aside for the erection of housing for serving members of the defence forces an amount not exceeding 5 per cent of the loan funds allocated to the State Housing Commission. The Commonwealth must make supplementary advances to the State to match any amount so set aside. Supplementary advances of \$1.2m were made by the Commonwealth in 1969-70.

The Commonwealth advances the loan funds to the State at a concessional interest rate of 1 per cent below the long-term Commonwealth bond rate. At 7 May 1970 the long-term bond rate was 7 per cent per annum.

Operations under the Commonwealth-State Housing Agreements in Victoria to 30 June 1970 are summarised as follows :

1945 Agreement—1 July 1945 to 30 June 1956

Loan funds advanced	\$171,562,000
Number of dwellings completed by State Housing Commission	30,925

1956–1966 Agreement—1 July 1956 to 30 June 1970

	\$
Loan funds advanced	374,200,000
Loan funds allocated to State Housing Commission	265,680,000
Loan funds allocated to Home Builders' Account	108,520,000
Drawings from Home Builders' Account by co-operative terminating housing societies	146,074,844
Supplementary advances made by Commonwealth for housing for defence forces	21,010,268
	number
Dwellings completed by State Housing Commission	34,548
Dwellings completed or purchased under Home Builders' Account	21,903

War Service Homes

Under the *War Service Homes Act* 1918–1968, the Commonwealth Government provides assistance in acquiring a home to persons who were members of the Australian Forces and Nursing Services enlisted or appointed for or employed on active service outside Australia or on a ship of war, during the First and Second World Wars, and persons who served in the war-like operations in Korea or Malaya, or who have served on "special service" as defined in the *Repatriation (Special Overseas Service) Act* 1962–1968. Assistance may be granted also to dependent widowed mothers of unmarried eligible persons and to the widows of eligible persons.

The Director of War Service Homes is responsible for the administration of the War Service Homes Act, subject to the directions of the Minister for Housing. The Director may erect homes on land acquired for that purpose or owned by an eligible person; sell homes on a rent-purchase system; and make advances for the erection or purchase of homes and, subject to certain conditions, for the discharge of a mortgage on a home.

The maximum loan which may be made available is \$8,000 and a period of repayment may be granted up to 45 years. In the case of a widow or widowed mother of an Australian ex-serviceman the period may be extended to 50 years. The rate of interest is $3\frac{3}{4}$ per cent per annum.

The following table shows the number of homes provided in Victoria under the War Service Homes Act, the total amount advanced under the Act, the instalments paid, and the number of loans repaid in each of the five years from 1965–66 to 1969–70 :

VICTORIA—WAR SERVICE HOMES SCHEME : OPERATIONS

Year	Homes provided during year				Total homes provided from inception to end of year	Annual expenditure	Installments paid (a)	Loans repaid
	By erection	By purchase	By discharge of mortgage	Total				
1965-66	373	1,956	461	2,790	77,537	\$'000 18,394	\$'000 18,681	1,395
1966-67	344	1,447	369	2,160	79,697	14,401	20,149	1,518
1967-68	187	1,046	321	1,554	81,251	10,511	20,298	1,532
1968-69	167	1,320	326	1,813	83,064	13,085	21,039	1,576
1969-70	200	1,249	362	1,811	84,875	13,675	22,175	1,735

(a) Includes excess instalment payments.

Home Savings Grant Scheme

The purpose of the Home Savings Grant Scheme is to assist young married persons, and young widowed or divorced persons with dependent children, to purchase or build their own homes. The Scheme is also aimed at increasing the proportion of total private savings available for housing by encouraging young people to save with those institutions that provide the bulk of long-term housing finance.

The Scheme is governed by the *Homes Savings Grant Act 1964-1970* which authorises the payment of the grants from the National Welfare Fund.

The Scheme provides for the payment of grants of \$1 for every \$3 saved by eligible persons under 36 years of age for the first home they own after marriage. The savings must be made in an approved form and held over a period of at least three years immediately before the date the contract to buy or build the home was made, or the building of the home began. The maximum grant to a married couple, to a husband or wife if only one is eligible, or to a widowed or divorced person, is \$500 on savings of \$1,500 or more. Smaller grants, down to a minimum of \$10, are payable on lesser amounts saved.

The grant is payable for existing homes and homes being built. A home unit or own-your-own flat may also qualify. The value of the home, including the land, the house itself, and any other improvements, must not exceed \$17,500, if the contract to buy or build the home was made, or building of the home began, on or after 27 October 1969. Most homes are eligible, the main exception being homes purchased from the State housing authorities that have been built with money advanced by the Commonwealth under the Commonwealth-State Housing Agreement at concessional rates of interest.

The main forms of savings acceptable under the Scheme are home savings accounts with savings banks, fixed deposits with trading banks, deposits with or shares in registered building or co-operative housing societies, and savings with credit unions that have sought to be, and have become, approved credit unions for the purposes of the scheme.

The following tables prepared by the Home Savings Grants Branch of the Department of Housing show particulars of its activities for the years 1965-66 to 1969-70.

VICTORIA—HOME SAVINGS GRANT SCHEME : OPERATIONS

Year	Applications received	Applications approved	Grants approved	Average grant	Expenditure from National Welfare Fund
	number	number	\$'000	\$	\$'000
1965-66	9,219	9,193	4,214	458	4,184
1966-67	9,902	8,929	3,928	440	3,891
1967-68	11,329	10,717	4,527	422	4,470
1968-69	11,685	9,948	4,233	426	4,379
1969-70	11,806	9,617	4,256	443	4,228

As grants are payable only to eligible persons under the Act, details in the following tables should not be regarded as being applicable to home owners in general.

VICTORIA—HOME SAVINGS GRANT SCHEME : APPLICATIONS APPROVED, MANNER OF ACQUISITION, AND TOTAL VALUE OF HOMES

Manner of acquisition	1965-66	1966-67	1967-68	1968-69	1969-70
Purchase of home (a)—					
Number of applications approved	4,762	4,725	5,992	5,743	5,863
Total value of homes (\$'000)	46,941	48,411	62,550	63,983	67,542
Purchase of flat/home unit—					
Number of applications approved	18	35	60	59	47
Total value of homes (\$'000)	190	352	638	639	531
Built under contract—					
Number of applications approved	3,862	3,703	4,084	3,729	3,353
Total value of homes (\$'000)	41,782	41,827	47,956	46,102	42,735
Owner-built—					
Number of applications approved	551	466	581	417	354
Total value of homes (\$'000) (b)	5,525	4,917	6,509	4,717	4,338
Total all homes—					
Number of applications approved	9,193	8,929	10,717	9,948	9,617
Total value of homes (\$'000)	94,438	95,507	117,654	115,440	115,146

(a) Includes purchase of new and previously occupied houses.

(b) Usually based on the cost of the land and the assessed value of the dwelling.

The average values of homes for which applications for grants were approved during 1967-68, 1968-69, and 1969-70 were \$10,978, \$11,604, and \$11,973, respectively.

VICTORIA—HOME SAVINGS GRANT SCHEME : APPLICATIONS APPROVED, METHOD OF FINANCING, AND AVERAGE AMOUNT OF MORTGAGE FINANCE

Year	First mortgage loan only	First and second mortgage loans	Other (a)	Total mortgage loans	Average first mortgage loan (b)	Average second mortgage loan
	number	number	number	number	\$	\$
1965-66	7,134	1,213	846	9,193	6,729	1,455
1966-67	6,942	1,320	667	8,929	7,030	1,507
1967-68	8,341	1,544	832	10,717	7,182	1,542
1968-69	8,109	1,260	579	9,948	7,894	1,646
1969-70	7,841	1,203	573	9,617	8,173	1,813

(a) Homes financed either from the applicant's own resources or with personal or unsecured loans or purchased under a terms contract of sale.

(b) Includes homes financed with first mortgage only and with first and second mortgage loans.

Transitory flats for migrants

In 1967 the Commonwealth Government decided to introduce, as an experiment, a scheme to provide fully furnished flats for occupation by newly arrived migrant families for maximum periods of six months. The purpose of the scheme is to improve the standard of transitory accommodation available to migrant families and to allow them to enjoy a normal family life during their settling-in period. The current programme provides for 440 flats, of which about 100 are being provided in Melbourne. The Commonwealth Department of Housing is responsible for the provision, management, and maintenance of the flats.

Dwellings for Aged Pensioners Scheme

The Scheme is governed by the *States Grants (Dwellings for Aged Pensioners) Act* 1969 which was assented to on 27 September 1969. The legislation arose from the Commonwealth Government's offer to make grants to the States for the provision of self-contained accommodation for eligible single age pensioners, upon the States undertaking not to reduce the level of their expenditure during recent years on aged persons housing from funds other than the grants.

An amount of \$25m has been allocated among the States to be made available to them over the 5 year period 1969-70 to 1973-74.

The purpose of the Scheme is to provide reasonable accommodation, at rents they can afford to pay, for single elderly pensioners living alone in private accommodation and paying too high a proportion of their pensions in rent. Accordingly, an eligible pensioner as defined by the Act is a person in receipt of an age pension, or one who qualifies for a service pension because of age, and is entitled to receive supplementary assistance under the *Social Services Act* 1947-1969 or *Repatriation Act* 1920-1969.

Building schemes are submitted by the State housing authorities to the Department for approval by the Minister. The accommodation to be provided, apart from meeting other requirements, must be single, self-contained, of an adequate size and standard, and be available at reasonable rentals. Following approval of each scheme the Department arranges payment of a grant in quarterly instalments in accordance with the progress made on construction.

The Minister has approved for the purposes of the Act all nine building schemes submitted to 30 June 1970 by the Housing Commission, Victoria. These schemes, estimated to cost \$1,675,000, will provide 316 units of accommodation and the first grant sought (\$200,000) was paid on 10 April 1970.

Housing Loans Insurance Corporation

The Housing Loans Insurance Corporation was established by the *Housing Loans Insurance Act* 1965-1966 to administer the Commonwealth Government's Housing Loans Insurance Scheme under which approved lenders may be insured against losses arising from the making of housing loans. The Corporation consists of a chairman (who is also managing director) and a deputy chairman, who are full-time members, and three part-time members, all of whom are appointed by the Governor-General.

The main purpose of the Housing Loans Insurance Scheme is to assist people to borrow as a single loan, at a reasonable rate of interest, the

money they need and can afford to re-pay to obtain a home suited to their requirements.

To encourage lenders to make high ratio loans, the Corporation may insure a loan of up to \$30,000. The maximum loan to valuation ratio is 95 per cent where the security is a house. For other loans the maximum is 90 per cent.

A once and for all premium is charged by the Corporation at the time the loan is made. The premium is payable by the borrower but lenders may agree to add it to the amount of the loan for repayment by the borrower over the period of the loan. In May 1971 reduced premium rates came into force. On loans comprising 90 to 95 per cent of the valuation of a home the premium is 1.5 per cent of the amount of the loan. On loans less than 90 per cent of valuation, the premium falls progressively down to 0.25 per cent on loans of less than 70 per cent of valuation. Previously, the maximum premium of 1.5 per cent did not fall unless the loan was less than 85 per cent of valuation and the minimum premium was 0.5 per cent. At May 1971 the maximum rate of interest chargeable on loans being insured was 8.25 per cent per annum (increased from 7.75 per cent per annum in May 1970) and the maximum period for repayment was forty years. The maximum rate of interest is kept under review and may be varied by the Corporation with the concurrence of the Commonwealth Minister for Housing.

The Corporation will insure a loan made to enable a borrower who is to occupy the dwelling to buy or build a house, to buy a home unit, or to discharge an existing mortgage. A loan for a dwelling consisting of two units of accommodation is insurable if one of the units is to be occupied by the borrower. Loans for alterations and extensions and loans to meet expenses of providing or improving lighting, sewerage, drainage, fences, roads, etc., are also insurable. An insurable loan normally must be secured by a first mortgage over the property concerned, but a second mortgage may be an acceptable security for a loan for such purposes as minor alterations or improvements to the property.

An insured loan may be made only by an approved lender. Approved lenders are appointed by the Corporation from within approved classes of lenders specified by the Commonwealth Minister for Housing. Approved classes include banks, building societies, life insurance and general insurance companies, trustee companies, friendly societies, mortgage management companies, solicitors, and trustees of superannuation funds.

The Housing Loans Insurance Corporation commenced its insurance operations in November 1965.

During 1969-70, 3,854 loans for \$33.2m were insured in Victoria. Comparable figures for 1968-69 were 3,373 loans for \$27.3m.

State authorities

Housing Commission, Victoria

The recommendation of a Board of Inquiry in 1936, which investigated

housing conditions within the State, resulted in the passing of the *Housing Act* 1937, and the appointment of the Housing Commission in March 1938 to be the housing authority of the State.

The main objects of the Commission as now laid down are the improvement of existing housing conditions; the provision of adequate and suitable housing accommodation for persons displaced from slum reclamation areas or living under unsatisfactory conditions, and for persons of limited means; the sale of houses to eligible persons and the making of advances to such persons to enable them to own their homes; the development of land for housing and related purposes; and the giving of advice to the public with respect to finance for the purchase or construction of homes.

Until the 1945 Commonwealth-State Housing Agreement was executed, the construction of dwellings by the Commission had been financed by loan funds provided by the State and by three specific debenture issues raised by the Commission. Since the signing of the Agreement, finance for the construction of dwellings has been obtained from the Commonwealth Government.

Very few houses were sold by the Commission until 1954, but the added emphasis given to the construction of homes for private ownership by the amendments in the Commonwealth-State Housing Agreement in 1955-56 had the effect of substantially increasing the number of houses sold. Of the 66,801 dwelling units built up to 30 June 1970 a total of 29,539 houses have been sold (16,051 in the metropolitan area and 13,488 in the country).

The Commission is continuing to acquire and clear for redevelopment decadent areas within the inner metropolitan area.

VICTORIA—HOUSING COMMISSION: DWELLING CONSTRUCTION

Geographical distribution (a)	Houses and flat units				
	1965-66	1966-67	1967-68	1968-69	1969-70
COMPLETED					
Melbourne Statistical Division	1,530	1,685	1,349	1,228	1,815
Remainder of State	1,156	1,431	865	903	835
State total	2,686	3,116	2,214	2,131	2,650
UNDER CONTRACT AT END OF PERIOD (INCLUDES CONTRACTS LET, WORK NOT STARTED)					
Melbourne Statistical Division	1,168	1,276	1,483	1,964	2,299
Remainder of State	1,007	603	612	695	851
State total	2,175	1,879	2,095	2,659	3,150

Source: Housing Commission annual reports.

(a) Figures are according to boundaries as determined at 30 June 1966.

VICTORIA—HOUSING COMMISSION : REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
REVENUE					
Rentals	12,983	14,241	15,044	15,861	16,657
Gross surplus—house sales	2,460	1,830	1,628	1,872	2,496
Loan redemption written back less allowances to house purchasers	329	273	233	319	389
Interest—House sales (net)	1,762	1,806	1,826	1,831	1,852
Sundry	161	161	148	314	418
Miscellaneous	126	281	230	337	314
Total revenue	17,822	18,591	19,108	20,533	22,126
EXPENDITURE					
Interest—less amounts capitalised and applied to house sales	5,574	5,907	6,268	6,782	9,559
Loan redemption—Commonwealth—State Agreement	1,834	1,898	1,967	2,078	
Contribution to National Debt Sinking Fund	4	3	3	3	
Redemption of debentures and Debenture Loan Sinking Fund contribution	8	8	8	8	8
Administration—General	1,050	1,153	1,222	1,298	1,318
House and land sales	611	657	720	766	839
Rates—less amount capitalised	2,057	2,255	2,407	2,556	2,668
Provision for accrued maintenance	2,463	2,507	2,554	2,586	2,636
Provision for irrecoverable rents	21	13	27	27	57
House purchasers' Death Benefit Fund appropriation	485	477	469	463	461
Transfer to house sales Reserve Suspense Account	1,561	1,190	527	573	1,358
Transfer to House Purchasers' Interest Receivable Reserve	992	1,000	993	956	951
Appropriation of house sales profits for slum reclamation works	300	300	600	600	600
Other	615	737	775	1,096	1,503
Total expenditure	17,574	18,106	18,540	19,792	21,975
Surplus	247	486	568	741	151
Fixed assets at 30 June	243,762	262,665	275,293	294,332	315,245
Loan indebtedness at 30 June (a)—Government advances	335,849	357,184	379,043	402,512	425,803
Debenture issues	600	600	600	600	600
Death Benefit Fund advances	1,564	1,914	2,846	3,449	3,959

Source : Housing Commission annual reports.

(a) Excluding subsidies from State Loan Fund for slum reclamation.

Further reference, 1965

Ministry of Aboriginal Affairs

Under the *Aboriginal Affairs Act* 1967, the Minister for Aboriginal Affairs is empowered to buy houses or land on which to erect houses for occupation by Aborigines. At 30 June 1971 the Ministry had 166 houses in Victorian cities and provincial centres and 24 houses on the only two

Aboriginal Reserves remaining in the State. The former transitional housing settlements in Robinvale and Mooroopna have been closed. In accordance with the *Aboriginal Lands Act* 1970 the ownership of the remaining two Aboriginal Reserves in Victoria, at Lake Tyers and at Framlingham, was transferred with effect from 1 July 1971 to the trusteeship of certain of the recognised local residents. The future of both former Reserves is accordingly now subject to the direction of the respective Aboriginal Trusts.

Rural Finance and Settlement Commission

The Rural Finance and Settlement Commission was constituted in March 1962 by the passing of the *Rural Finance and Settlement Commission Act* 1961, which provided for the merger of the Rural Finance Corporation and the Soldier Settlement Commission.

The Commission administered the settlement of eligible discharged servicemen on the land as part of the general scheme of rehabilitation of ex-servicemen and now administers land settlement under the *Land Settlement Act* 1959. During the year 1969-70 fifty-eight houses were erected. At 30 June 1970 a total of 3,382 houses had been completed since the inception of the Soldier Settlement Commission in 1945, and five were still under construction.

Home Finance Trust

The Home Finance Trust is a corporate body constituted under the *Home Finance Act* 1962. It is authorised to receive money on deposit, the repayment of which is guaranteed by the Government of Victoria, for the purpose of making housing loans on the security of first and second mortgages.

Under the terms of the Act the Trust is precluded from making loans in certain circumstances.

The number of loans granted by the Trust to 30 June 1970 and subsisting totalled 3,760 on the security of first mortgages and 2,056 on second mortgages, the amounts involved being \$25.9m and \$2.6m, respectively.

Further reference, 1967

Approved housing institutions

The *Home Finance Act* 1962 empowers the Treasurer of Victoria, *inter alia*, to guarantee, in certain circumstances, the repayment of part of a housing loan made by an approved institution on the security of a first mortgage.

The Treasurer's guarantee covers that portion of a loan which exceeds the institution's loan limit, whether statutory or under the terms of a trust, or where there is no such limit, the guarantee applies to the amount of loan in excess of 60 per cent of the valuation of the security.

Guarantees are available under the Act for loans up to 95 per cent of the value of the security.

At 30 June 1970 there were twenty-one approved institutions. Guarantees given by the Treasurer and subsisting totalled 252, the amount involved being \$426,441.

Further reference, 1967

Co-operative housing societies

The *Co-operative Housing Societies Act* 1958 empowers societies to raise money on loan for the purposes of making advances to their members to erect houses; to purchase houses (within certain age limits); to meet street making and sewerage installation charges; to undertake additional permanent improvements to a dwelling acquired through a society; to maintain and keep the house in proper repair; and to purchase a residential flat on the security of a stratum title.

Until 30 June 1956 co-operative housing societies were entirely dependent on institutional finance for their funds, but from 1956 they have received a portion of the State's housing loan allocation under the Commonwealth-State Housing Agreements.

The following table, compiled from annual reports published by the Registrar of Co-operative Housing Societies, provides particulars relating to the operations of societies at 30 June of each of the five years 1966 to 1970:

VICTORIA—OPERATIONS OF CO-OPERATIVE HOUSING SOCIETIES

Particulars	Unit	At 30 June—				
		1966	1967	1968	1969	1970
Societies registered	No.	902	1,070	1,126	1,165	1,267
Members registered	No.	49,610	54,012	54,340	53,563	53,028
Shares subscribed	No.	2,529,821	2,783,681	2,888,262	2,886,738	2,897,916
Nominal share capital	\$m	253	278	289	288	289
Advances approved	No.	43,882	45,594	46,165	46,273	46,445
"	\$m	232	250	265	274	281
Government guarantees executed	No.	648	678	689	718	758
"	\$m	175	180	180	184	191
Indemnities given and subsisting	No.	2,190	2,353	2,679	2,793	2,773
Indemnities subsisting	\$'000	965	1,074	1,297	1,407	1,410
Housing loan funds paid into Home Builders' Account	\$m	68	77	87	98	108
Dwelling-houses completed to date (a)	No.	56,088	59,508	63,255	66,253	68,994
Dwelling-houses in course of erection (a)	No.	2,111	2,355	2,142	1,496	1,279

(a) Includes residential flats.

Further reference, 1967*State Savings Bank of Victoria*

The State Savings Bank of Victoria grants loans to eligible persons to build, purchase, or improve homes upon such terms and subject to such covenants and conditions as are prescribed or are fixed by the Commissioners.

Loans are made from the Savings Bank and Credit Foncier Departments. Particulars for the year ended 30 June 1970 may be found on page 660.

Other State authorities

State Government authorities (other than those providing rental housing under Housing Agreements) such as the Public Works Department, State Electricity Commission, Victorian Railways, State Rivers and Water Supply Commission, etc., from time to time provide the necessary land and finance for the erection of dwellings for employees of those departments. The rentals charged are fixed according to the salaries of the officers occupying the dwellings. The dwellings erected by these authorities do not come under the control of the Housing Commission.

Other lenders

Details of all loans made to home purchasers are not available. However, particulars of the permanent finance made available by the major institutions to persons buying or building new homes in Victoria for their personal use are shown, for each of the years 1966-67 to 1970-71, in the following table. The amounts shown are actual payments during the periods indicated, as distinct from loans approved, and do not include loans made to institutions, public authorities, corporate bodies, or to persons building or buying homes for resale or for investment purposes. A new home is regarded as a house or flat not more than twelve months old and permanent finance means finance granted for a term of three years or more.

VICTORIA—HOUSING FINANCE STATISTICS : PERMANENT FINANCE FOR
NEW HOMES ONLY : PARTICULARS OF AMOUNTS PAID BY MAJOR
INSTITUTIONS AS LOANS TO PERSONS BUYING OR BUILDING
HOMES IN VICTORIA FOR THEIR PERSONAL USE
(\$'000)

Institution	Payments during year—				
	1966-67	1967-68	1968-69	1969-70	1970-71
Savings banks and co-operative housing societies	80,024	89,737	100,234	104,074	112,801
Life insurance offices	6,694	7,071	9,243	9,851	9,672
Friendly societies	645	763	1,049	1,650	2,006
Building societies	3,440	5,984	11,855	18,317	19,527
Government instrumentalities	20,239	16,778	15,952	21,055	21,319
Total	111,043	120,332	138,333	154,946	165,325

FINANCE

PUBLIC FINANCE

Economic importance of government financial activity

Financial transactions

During the last three or four decades, governments have come to accept new and wider responsibilities for economic stability and growth and for the social welfare of their peoples. They are now in a position where a large proportion of their actions is undertaken to achieve economic and social ends. This applies not only to their regulatory activities but also to their financial transactions. These transactions may be classified in the following ways :

Purchases of goods and services

Governments are important purchasers of goods and services which they require to provide current services, e.g., defence services, health and educational facilities; and capital assets such as office buildings, power installations, and railway track and rolling stock. Expenditure of this kind generates income and, consequently, rises or falls in its level affect the purchasing power of the community. In addition, governmental requirements determine the allocation of national resources and the composition of national capital assets.

Transfers of income between sections of the community

Governments are also agents for the redistribution of incomes throughout the community. Their role of tax gatherer permits them to do this by compulsorily withdrawing purchasing power from one section of the community and transferring it to another in the form, for example, of social service benefits or subsidies to producers. The receipt and payment of interest are other ways in which governments redistribute income.

Production and trading

As well as providing a considerable volume of services free (or at nominal charges), governments also engage in trading activities in which they produce and sell goods and services at prices designed substantially to cover costs. These services are usually of the public utility type, e.g., the supply of gas and electricity, transport services, and water supply and sewerage of which governments are usually the sole providers. Their distinguishing characteristic is that they are, to a certain extent, subject to market forces.

Victorian governmental activity

Victorian governmental activity is carried out by:

1. the legislative, executive, and judicial organs of the State ;
2. semi-governmental bodies being statutory authorities created to carry out specific activities, e.g., the provision of gas, electricity, water supply, and sewerage facilities on behalf of the State Government or bodies in which the State Government has a controlling interest; and
3. local government bodies set up under the Local Government Act to carry out the functions of local government in defined areas (known as municipalities), and which are elected by the residents or property owners or both in the area. This category also includes authorities created or acquired by local government authorities.

Particulars of the activities of semi-governmental and local government authorities are to be found in Part 5 and other appropriate Parts of this *Year Book*. It is informative, however, in this Part to summarise the public authority activity in the State.

Particulars of Commonwealth and State transactions classified so as to facilitate economic analysis are included in the *Australian National Accounts : National Income and Expenditure*, published by the Commonwealth Statistician, Canberra. The following summaries of the transactions of Victorian public authorities are on the same basis as to scope and classification as tables of the Current and Capital Accounts of State and Local Government Authorities published in the *Australian National Accounts : National Income and Expenditure*, and in the annual budget paper *National Income and Expenditure*. They are a consolidation (necessarily approximate) of the activities of the major funds and authorities in the State.

Particulars in the summaries were compiled from financial statements published by the authorities concerned which in some instances did not contain all the information desired. For this reason, the figures shown must be regarded as estimates and subject to revision as further investigation

VICTORIA—PUBLIC AUTHORITIES' CURRENT ACCOUNT
(\$m)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
RECEIPTS					
Taxation	255.9	286.3	318.8	370.2	392.5
Interest, etc., received	12.0	12.8	13.4	13.9	17.6
Public enterprises' income	103.0	111.1	111.8	122.1	120.1
Grants from Commonwealth Government authorities	209.1	229.2	262.7	286.0	318.5
Total receipts	580.0	639.3	706.8	792.3	848.7
OUTLAY					
Net current expenditure on goods and services	318.3	348.4	390.4	438.8	506.9
Subsidies	0.8	0.7	3.2	2.7	1.7
Interest, etc., paid	147.3	158.5	171.8	186.4	204.4
Overseas grants	0.3	0.2	0.3	0.3	0.3
Cash benefits to persons	4.3	4.7	4.7	6.3	5.2
Grants towards private capital expenditure	2.2	2.4	3.6	3.9	4.2
Surplus on current account	106.9	124.4	132.8	153.8	125.9
Total outlay	580.0	639.3	706.8	792.3	848.7

proceeds. A large proportion of governmental financial transactions is in the nature of transfers between funds, e.g., transfers from the Consolidated Revenue Fund to the Hospitals and Charities Trust Fund, and between authorities, such as transfers from the Loan Fund to the State Electricity Commission of Victoria. Where they could be identified, such transfers have been cancelled out. In some cases, different bases of classification from those used in succeeding sections of this Part were adopted for national income purposes (see Appendix B, pages 772-8, for details of Australian National Accounts).

VICTORIA—PUBLIC AUTHORITIES' CAPITAL ACCOUNT
(\$m)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
SOURCES OF FUNDS					
Depreciation allowances	47.5	49.1	56.2	58.1	63.1
Net sale of securities—					
Commonwealth securities—					
Securities other than Treasury bills—					
Australia	103.9	118.1	147.7	126.6	141.6
Overseas	-6.1	-16.7	-24.7	-4.9	-18.0
Local and semi-governmental securities	80.4	96.1	77.4	108.4	105.2
Advances from Commonwealth Government authorities	30.9	28.6	33.2	24.9	48.5
Grants from Commonwealth Government authorities	36.9	42.8	51.4	51.8	61.6
Surplus on State and local government authorities current account	106.9	124.4	132.8	153.8	125.9
Other funds available (including errors and omissions)	25.1	33.9	36.0	29.7	36.0
Reduction in cash and bank balances	12.5	-12.3	-4.9	-0.9	11.4
Total sources of funds	438.0	464.1	505.1	547.5	575.4
USES OF FUNDS					
Fixed capital expenditure on new assets	410.5	440.9	473.9	524.1	547.4
Expenditure on existing assets	2.2	2.5	0.3	3.7	4.8
Increase in value of stocks	2.3	0.9	2.5	-0.4	2.7
Advances to public financial enterprises	23.0	19.8	28.3	20.1	20.5
Total uses of funds	438.0	464.1	505.1	547.5	575.4

Financial relations with the Commonwealth

The Federal Constitution specifies the matters regarding which the Commonwealth Parliament has power to legislate. They include defence, external affairs, trade and commerce with other countries and between the States, customs and excise, posts and telegraphs, navigation, lighthouses, quarantine, census and statistics, currency and banking, insurance, copyright and trade marks, naturalisation, immigration, invalid and age pensions, social services, industrial relations where disputes extend beyond the boundaries of a State, taxation that does not discriminate between States or parts of States, the taking over by the Commonwealth of the public debts of the States, and the borrowing of money by the Commonwealth for the States. Some of these powers are given exclusively to the Commonwealth, e.g., defence, and customs and excise, but, in the majority of matters, the Commonwealth and State Governments have concurrent powers, Commonwealth law prevailing where there is conflict. Matters other than those

specified in the Constitution remain the concern of the States. Governmental activity at the State level embraces education, health and welfare services, the development of internal resources, e.g., irrigation and water supply, land settlement, soil conservation, maintenance of law and order, and the provision of public utility services, e.g., roads, electricity and gas, public transport, water supply and sewerage. These activities are carried out by State Departments and by statutory and local governing bodies created by the State Governments. The States have direct access to a small proportion only of moneys required for revenue and capital purposes. This has come about in three ways :

1. through the surrender, under the Constitution, of the right to levy customs and excise duties ;
2. through the Financial Agreement of 1927 between the Commonwealth and State Governments, under which the Commonwealth became the borrowing agent for the States ; and
3. through the Commonwealth exercising its right to impose taxation in the field of personal and company income.

The lack of balance between the spending functions and the sources of revenue available to the Commonwealth and the States, respectively, has given rise to a system of grants from the Commonwealth Government to the States. These grants may be unconditional or may be earmarked for specific purposes such as roads and universities. Important examples of the former are the financial assistance grants payable under the uniform tax system and special grants payable under section 96 of the Constitution, which provide assistance to those States experiencing difficulty in raising revenue or providing services on a comparable level with the other States. At present, South Australia and Tasmania are the only States receiving special grants under section 96. Western Australia, which withdrew from claimancy in 1968-69, has since received a grant in lieu of the special grant. However, this grant is subject to progressive reduction until the last payment is made in 1974-75.

Commonwealth fiscal superiority is supported by present day acceptance of the role of governments as agents of economic control and providers of social services on a large scale. In order to carry out these functions, the central government must have a substantial measure of control over taxation revenue and the level of public investment.

Financial Agreement between the Commonwealth and the States

The Financial Agreement of 12 December 1927 between the Commonwealth and the States came into being because it was thought desirable to adopt a co-ordinated approach to the loan market instead of independent approaches by the several governments, and because of the necessity of establishing sound sinking fund arrangements. It also provided for the sharing of State debt charges by the Commonwealth. The following is a summary of the main provisions :

1. Consolidation of public debt

On 1 July 1929 the Commonwealth took over the existing public debts of the States and assumed responsibility for the payment of related interest. This interest is reimbursed by the States, less the sum of \$15,169,824 per

annum which the Commonwealth agreed to contribute for a period of 58 years from 1 July 1927. Of this amount, Victoria receives \$4,254,318 annually. This payment is in compensation to the States for relinquishing, after Federation, the right to levy customs and excise duties.

2. Regulation of government borrowing

The Australian Loan Council was set up to co-ordinate the public borrowings of the Commonwealth and the States. It consists of the Prime Minister (or his nominee) as Chairman, and the State Premiers (or their nominees). Each financial year the Commonwealth and the several States submit to the Loan Council programmes setting out the amounts they desire to raise by loan during the ensuing year. Revenue deficits to be funded are included in the borrowing programmes, but borrowings for "temporary purposes" need not be included. Borrowing by the Commonwealth for defence purposes is outside the Agreement.

If the Loan Council considers that the total amount of the programmes cannot be borrowed at reasonable rates and conditions, it determines what amount shall be borrowed and may, by unanimous decision, allocate such amount between the Commonwealth and the States. In default of a unanimous decision, the allocation is determined by means of a formula written into the Agreement. Subject to the decisions of the Loan Council, the Commonwealth arranges all borrowings including those for conversions, renewals, and redemptions. However, the Commonwealth may borrow from the Commonwealth, or a State within its territory, from authorities, bodies, or institutions, or from the public by counter sales of securities subject to Loan Council approval. Commonwealth securities are issued for moneys borrowed in this way and amounts so borrowed are treated as part of the borrowing programme for the year. In addition the Commonwealth or a State may borrow for "temporary purposes" by way of overdraft or fixed deposit subject to limits fixed by the Loan Council.

3. Sinking fund provisions

The Financial Agreement also provided for the creation of sinking funds for debt existing at 30 June 1927 or incurred subsequently. Contributions to these are made jointly by the Commonwealth and the States on bases laid down. The sinking funds established under the Agreement are under the control of the National Debt Commission, an authority constituted under Commonwealth legislation and consisting of the Treasurer of the Commonwealth, the Chief Justice of the High Court, the Secretary to the Commonwealth Treasury, the Governor of the Reserve Bank, the Secretary to the Commonwealth Attorney-General's Department, and a representative of the States.

Sinking fund moneys are used to redeem unconverted securities at maturity, and to re-purchase securities on the stock market.

4. Borrowing by semi-governmental authorities

Under a "gentlemen's agreement", originally entered into by the members of the Loan Council in 1936, the Loan Council approved an aggregate yearly borrowing programme for semi-governmental and local authorities proposing to raise more than \$200,000 in a year. In June 1967 the Loan Council increased this amount to \$300,000. Individual borrowings by each of these authorities are also subject to Loan Council approval.

Before 1962-63 the Loan Council had approved overall borrowing programmes for authorities with individual programmes of \$200,000 or less. Since 1962-63 the Loan Council has placed no overall limits on the programmes of these smaller authorities. In keeping with the decision of June 1967 noted above, authorities may now borrow up to \$300,000 individually without any limit being placed on their aggregate borrowing.

The terms and conditions on which the Loan Council from time to time approves loan raisings are the same for both the large and small authorities.

5. Commonwealth influence on supply of loan moneys

The Commonwealth is in a position to control the supply of local loan moneys through the influence of Commonwealth policy on the borrowing system, indirectly through alterations in rates of taxation (which affect personal savings), and through the money it is prepared to make available from its own trust funds. Although loan raisings for each of the years 1962-63 and 1963-64 were adequate to complete governmental expenditure programmes (including redemptions), Commonwealth support was needed in other years. From 1 July 1951 to 30 June 1971, out of loan programmes amounting to \$10,425m, the Commonwealth has provided \$2,853m from the Australian currency proceeds of overseas loans and from budget surpluses.

The need for Commonwealth assistance by way of special loans should be considerably reduced as a result of the arrangements made at the June 1970 Loan Council meeting when it was decided that the Commonwealth will in future make an interest free capital grant to finance part of the States' annual works programmes. This grant will not increase the total funds available to State Governments, but, as it will result in lower State Government debt than would otherwise have been the case, there will be a substantial saving to the States in debt charges.

The first grant (\$200m of which Victoria's share was \$51m) was made in 1970-71. In accordance with the undertaking given by the Commonwealth at the June 1970 Premiers' Conference to increase the grant in subsequent years in proportion to the increase in the total works and housing programmes, the total grant for 1971-72 became \$209.8m with Victoria's share \$53.5m.

Grants to the States

The history of the principal payments to Victoria can be summarised as follows :

Financial agreements

Commonwealth contributions to interest and sinking fund charges on State debt have been described above.

Financial assistance grants

The States were supplanted by the Commonwealth as income taxing authorities during the Second World War when the Commonwealth needed to exploit this field of taxation to the full to meet its wartime obligations. Under the uniform taxation scheme, the Commonwealth became the sole authority levying taxes upon income. In return for vacating that field of taxation, the States received an annual payment from the Commonwealth as reimbursement for the loss of income tax revenue. A similar arrangement was made for entertainments tax, but this tax is no longer levied by the Commonwealth Government.

VICTORIA—COMMONWEALTH PAYMENTS TO OR FOR THE STATE (a)
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Financial agreement—					
Interest on State debt	4,254	4,254	4,254	4,254	4,254
Sinking fund on State debt (b)	4,225	4,524	4,885	5,189	5,600
General revenue grants	191,922	208,790	233,091	253,562	293,643
Commonwealth aid roads	27,508	29,443	31,286	33,113	38,160
Tuberculosis hospitals—reimbursement of capital expenditure, etc.	169	110	10	175	327
Mental institutions—contribution to capital expenditure	1,567	1,192	1,382	1,200	947
Grants to universities	12,496	14,461	17,164	19,180	18,455
Colleges of advanced education	..	2,213	5,465	5,545	7,728
Teachers colleges	..	..	500	1,621	3,252
Research grants	331	607	770	675	864
Science laboratories	2,799	2,799	3,553	3,055	4,037
Technical training	336	3,050	5,091	1,550	3,000
School libraries	..	..	..	500	2,225
Independent schools	..	..	..	..	3,952
Grants for agricultural extension services	298	508	667	986	1,027
Minor agricultural research	..	..	..	..	13
Salinity reduction—River Murray	..	..	600	800	170
Aboriginal advancement	..	..	..	225	347
Dwellings for aged pensioners	..	..	..	..	200
Road safety practices	20	23	23	23	23
Bovine brucellosis and T.B. eradication	..	..	..	..	37
Natural disaster payments	40	..	5,291	6,000	277
Housekeeper services	8	8	8	8	..
Blood transfusion services	144	276	176	193	225
Water resources	80	77	131	159	163
King River Dam	..	..	..	15	1,385
Other payments	..	..	..	..	120
Total	246,197	272,335	314,347	338,028	390,431

(a) Excludes subsidies and bounties to primary producers, payments from National Welfare Fund, and repayable loans.

(b) Paid to National Debt Sinking Fund.

The validity of the uniform tax legislation was challenged in the High Court in 1942 by Victoria, South Australia, Queensland, and Western Australia. The challenge was unsuccessful, the High Court finding that the Commonwealth could enforce priority in the collection of income tax and could make grants to the States under section 96 of the Constitution on the condition that they vacated the field of income taxation.

Victoria made a further challenge to the validity of the uniform tax legislation in 1955 and was supported by New South Wales in 1956. In particular, the power of the Commonwealth to make tax reimbursement grants conditional upon the States not levying income tax and the absolute priority of payment of Commonwealth income tax over State income taxes was disputed. In 1957 the High Court ruled:

1. unanimously, that the condition attaching to the tax reimbursement grants that the States should not levy income tax was valid; and
2. by a majority of four to three, that section 221 (1) (a) of the *Income Tax and Social Services Contribution Assessment Act* 1936-1956, which prohibited a taxpayer paying State income tax until Commonwealth income tax was paid, was invalid.

Details of the *States Grants (Income Tax Reimbursement) Act* 1942, the *States Grants (Entertainments Tax Reimbursement) Act* 1942, and the

States Grants (Tax Reimbursement) Act 1946–1948 are given in the *Official Year Book of the Commonwealth of Australia*, No. 37, pages 635–7 and No. 46, pages 835–8. Grants under the provisions of the 1946–1948 Act ceased after 1958–59.

The whole question of Commonwealth–State financial relations was examined in 1959 and this resulted in the enactment of the *States Grants Act* 1959 (operative until 1964–65—see *Victorian Year Book* 1965 and previous issues). These arrangements were reviewed in 1965 and 1967 when certain modifications, which applied to the period 1965–66 to 1969–70, were made (see *Victorian Year Book* 1971 and previous issues). The 1965 grants arrangements were reviewed at Premiers' Conferences in February and June 1970. The Premiers contended that the existing financial assistance grants formula produced an insufficient rate of growth in revenue assistance when considered in relation to expenditure commitments. They therefore suggested that the States should have access to income tax and that for a transitional period tax reimbursement grants should be determined by use of a system of increases which would be in line with the observed growth of income tax yields. These suggestions were rejected by the Commonwealth mainly on economic grounds but it conceded that there was a need for significant improvement in revenue assistance. The Commonwealth then proposed that this improvement should be effected in four main ways:

1. An interest-free capital grant of \$200m would be made in 1970–71, increasing in future years in proportion to the increase in the total Loan Council works and housing programme.
2. Grants would be made to meet the debt charges on \$200m of existing State debt in 1970–71 and further grants to meet the charges on \$200m would be made in each of the subsequent four years so that, as from the commencement of 1974–75, the Commonwealth would have taken over full responsibility for the debt charges of \$1,000m of State debt. This amount of debt would be formally transferred to the Commonwealth in June 1975. Victoria's share of this grant for 1970–71 was \$2.8m.
3. An addition of \$40m would be made to the 1970–71 grants determined under the existing formula and this amount would be incorporated in the 1970–71 base for purposes of determining the formula grants for 1971–72 and later years. The amount of \$40m would be distributed between the States in the same proportions as their 1970–71 formula grants.
4. There would be an increase in the betterment factor from 1.2 to 1.8 per cent to apply from 1971–72.

The Commonwealth also made the following proposals in relation to grants to individual States:

1. There would be a continuation of the \$2m addition that had been made to the base on which Queensland's grant was calculated in each of the five years of the previous arrangements.
2. In addition to its formula financial assistance grants, and in lieu of the amount of \$15.5m paid in 1968–69 and in 1969–70, Western Australia would receive amounts commencing with \$12.5m in 1970–71 and reducing by \$3m per annum in each of the subsequent four years. However, in recognition of the rapid rate of population growth and economic development

in Western Australia, the Commonwealth would in the Loan Council support increases in that State's share of the borrowing programmes to offset the reduction in revenue grants.

The States regarded these proposals as inadequate and suggested a minimum increase in the 1970-71 grants of \$90m and a minimum betterment factor of 3 per cent to apply from 1970-71. After considering the States' arguments and in particular the case put forward by New South Wales and Victoria that the absolute gap between their per capita grants and those of the smaller States was becoming larger year by year, the Commonwealth proposed that a grant of \$2 per capita be paid to New South Wales and Victoria in each of the next five years. This would be additional to the formula grants and would be included in the base used to determine these grants. In the event that any of the four less populous States considered that the additional per capita grants would adversely affect its ability to provide services of a standard comparable with New South Wales and Victoria, it would be open to that State to ask the Grants Commission to recommend a grant in addition to its share of the financial assistance grants.

On the question of State taxing powers the Commonwealth was prepared to examine with the States alternative possibilities for new growth taxes for the States.

Following the settling of the new grants arrangements at the June 1970 Premiers' Conference, there were four main developments in 1970-71 affecting the arrangements :

1. The constitutional validity of Commonwealth pay-roll tax as it applied to State Governments was challenged in the High Court by Victoria.
2. Duty ceased to be levied on receipts after 30 September 1970 and the Commonwealth agreed to compensate the States for the resultant loss of revenue.
3. In recognition of budgetary difficulties faced by the States resulting from large increases in wage costs after their 1970-71 budgets had been brought down, the Commonwealth agreed to provide special revenue assistance of \$43m in 1970-71. (Victoria's share \$10.6m.)
4. The Commonwealth agreed to transfer pay-roll tax to the States as from a date to be fixed in 1971-72.

On 14 May 1971 the High Court unanimously ruled that the *Pay-roll Tax Assessment Act* 1941-1969 was valid in its application to State Governments.

As from 1 September 1971 pay-roll tax collection was transferred from the Commonwealth to the States.

Grants for road construction

The Commonwealth has made grants to the States for road purposes for some considerable time. Particulars of Acts (commencing with the *Main Roads Development Act* 1923-1925), under which these payments were made, are given in the publication *Commonwealth Payments to or for the States* which is issued annually with the Commonwealth Budget.

Commonwealth payments to be made to the States for roads expenditure during the five year period from 1 July 1969 were announced at a special Premiers' Conference held in March 1969.

In considering the new arrangements the Commonwealth was assisted by the information and advice furnished by the Bureau of Roads, which was set up following the 1964 review of roads arrangements to undertake a thorough survey and appraisal of the existing roads system and anticipated roads requirements. The Commonwealth accepted the Bureau's assessment that, provided funds were applied economically, expenditure considerably higher than at present could be undertaken during the next five years. On this basis provision has been made in the *Commonwealth Aid Roads Act* 1969 for grants totalling \$1,252.1m to be paid to the States for roads over the five year period commencing on 1 July 1969.

An aim of the new arrangements is to bring the distribution more closely into accord with the relative needs for roads expenditure. The Commonwealth, however, recognised the problems that could be created for some States by too rapid a change from the distribution formula which had applied over the previous five years. The total grant of \$1,252.1m is thus divided into two parts. The principal grant totalling \$1,200m is distributed by giving equal weight to the distribution under the *Commonwealth Aid Roads Act* 1964 and to the distribution indicated by the Bureau of Roads analysis of the relative needs for roads expenditure. Victoria's share of this grant was \$43.5m in 1970-71 and will total \$254.4m during the quinquennium.

Supplementary payments of \$9m to South Australia, \$40.8m to Western Australia, and \$2.3m to Tasmania will account for the balance of \$52.1m to be distributed during the five year period.

Grants to universities

Commonwealth assistance to the States in respect of the recurrent expenditure of universities dates from 1951-52; in 1957-58 assistance was first given in respect of capital expenditures. An outline of assistance before 1971 is given in previous issues of the *Victorian Year Book*.

Commonwealth grants are subject to matching conditions. Grants for recurrent expenditures are made at present on the basis of \$1 Commonwealth for each \$1.85 State grant and university fees combined. Grants for capital expenditures are provided on a \$1 for \$1 basis with grants made by the States for this purpose. In each case there is an upper limit to the total amount of Commonwealth assistance to be made available during the course of a triennium.

In August 1969 the Commonwealth agreed to support recommendations contained in the Fourth Report of the Australian Universities Commission for a programme of assistance to State universities in the 1970-1972 triennium.

The *States Grants (Universities) Act* 1969 authorised Commonwealth grants of \$226.8m for the triennium of which \$161.2m is for recurrent expenditure, \$61.6m for capital expenditure, and \$4m for a programme in support of research and research training. Subsequent amending legislation increased the recurrent expenditure grant to \$180.2m to allow for increases in academic salaries and to provide for the Commonwealth's contribution towards the cost of a scheme of external studies at the University of Tasmania.

Victoria's share of this assistance for 1970-71 was \$16.2m for recurrent expenditures and \$6.0m for capital expenditures.

Grants for colleges of advanced education

The Report of the Committee on the Future of Tertiary Education in Australia recommended the establishment of a new type of educational institution to supplement universities and to be developed from, and around, segments of existing technical colleges now referred to as colleges of advanced education.

The Commonwealth has provided financial assistance for these institutions since 1965-66 and in August 1969 it accepted the financial recommendations of the Commonwealth Advisory Committee on Advanced Education for the 1970-1972 triennium.

The *States Grants (Advanced Education) Act* 1969 authorised Commonwealth grants of \$93.1m during the triennium made up of \$43.2m for recurrent expenditure, \$49.4m for capital expenditure, and \$0.5m for library facilities. Under subsequent amending legislation the grant for recurrent expenditure was increased to \$49m to meet the Commonwealth's share of the cost of increased academic salaries in colleges of advanced education during the triennium. The Commonwealth has also offered to meet its share of supplementary recurrent grants in the last eighteen months of the triennium towards the cost of exceptional increases in non-academic salaries and wages.

Victoria received \$6.2m for recurrent expenditure and \$4.9m for capital expenditure from this grant during 1970-71.

Grants for science laboratories and equipment in secondary schools

From 1964-65 onwards, the Commonwealth has made unmatched grants to the States for the purpose of improving science teaching in secondary schools.

The *States Grants (Science Laboratories) Act* 1971 extends the operation of this scheme for a further four years and provides for a total payment to the States of \$43.3m during the period. Of the \$10.8m provided for each of the four years, Victoria's entitlement was \$3.37m divided between government schools \$2.00m and non-government schools \$1.36m.

Grants for technical training, buildings, and equipment

The *States Grants (Science Laboratories and Technical Training) Act* 1964 also introduced in 1964-65 grants to the States towards the building and equipment cost of technical schools or colleges conducted by the States. Continuation of these grants for the three financial years 1968-69 to 1970-71 was authorised by the *States Grants (Technical Training) Act* 1968. During 1970-71 Victoria received \$3.9m from this grant.

Grants for teachers colleges

The *States Grants (Teachers Colleges) Act* 1970 provided for the payment of unmatched grants to the States towards the construction and equipping of colleges for the training of teachers. For the triennium to 30 June 1973 a total payment of \$30m was authorised. For the year 1970-71 Victoria's share was \$1.25m.

Research grants

From 1965-66 the Commonwealth has made grants to the States for research projects, selected on the basis of relative merit, to be carried out in any academic field by individuals or research teams.

In August 1969 the Commonwealth agreed to meet the full cost of a \$12.5m programme for the 1970-1972 triennium for the Australian Research Grants Committee. The cost of the programme has subsequently increased to \$13.3m. Victoria's share of this grant for 1970-71 was \$954,000.

The Commonwealth is also making available to the States during the triennium a further \$4m for a special programme of research and research training in State universities.

Grants for school libraries

Under the *States Grants (Secondary School Libraries) Act* 1968, grants of \$27m will be made available to the States over the three years commencing on 1 January 1969 to finance buildings, etc., for libraries in government and non-government secondary schools. The Act provides that not more than one third of this amount may be authorised for payment before 31 December 1969 and two thirds before 31 December 1970.

Victoria's share of this grant for 1970-71 was \$3.2m of which \$2.45m was for government schools and \$0.75m for non-government schools.

Grants for dwellings for aged pensioners

The *States Grants (Dwellings for Aged Pensioners) Act* 1969 enables the Commonwealth to make grants of \$25m to the States over a five year period as from 1 July 1969 for the purpose of carrying out approved building schemes to provide self-contained accommodation for single aged pensioners and those who qualify for service pensions by reason of age.

Victoria received \$1.9m from this grant during 1970-71.

Natural disaster payments

When serious floods, cyclones, bushfires, or other similar natural disasters occur the Commonwealth normally joins with the State concerned in financing schemes for relief of personal hardship, usually on a \$1 for \$1 basis. For many years Victoria did not find it necessary to seek substantial Commonwealth assistance for this purpose but during the three years 1967-68 to 1969-70 droughts and bushfires in Victoria resulted in the provision of Commonwealth grants totalling \$11.6m. No payments were made in 1970-71.

Grants for independent schools

The Commonwealth has agreed to contribute, as from January 1970, towards the running costs of independent schools throughout Australia. This assistance takes the form of an annual per pupil subsidy at the rates of \$35 per primary pupil and \$50 per secondary pupil. The amount paid for the year 1970-71 was \$24.3m, Victoria's share being \$7.8m.

Housing Assistance Grants

As from the year 1971-72 the Commonwealth has decided to adopt a new approach to Commonwealth assistance to the States for housing.

Under the previous Commonwealth-State Housing Agreements such amounts as were nominated for housing by each State out of its annual Loan Council borrowing programmes were advanced by the Commonwealth at a rate of interest 1 per cent below the long-term bond rate. Under the new approach the States will continue to determine the amount of their annual Loan Council borrowing programmes to be allocated to housing. However, in lieu of the interest concession, the Commonwealth will offer the

States a basic grant of \$2.75m a year, payable for a period of 30 years, in respect of housing being provided for low income groups and of Home Builders' Account operations in each year from 1971-72 to 1975-76.

Payment of the basic grant will be conditional upon the State continuing to pay to a Home Builders' Account at least 30 per cent of its annual allocation to housing from its approved borrowing programme and upon the same percentage of the grants in respect of a year's activity being paid to that Account.

The proposed basic grants will be distributed between the States in the same proportion as the annual housing allocation of a State from its approved borrowing programme in the preceding year bears to total State annual allocations for the purpose in that year.

The Commonwealth also intends to offer an additional housing grant of \$1.25m each year for the next five years as a general Commonwealth contribution towards the cost of reduced rents charged to needy families occupying housing authority homes. This grant will be distributed among the States in the same proportion as the amount of a State's approved borrowing programme allocated to its housing authority in the preceding year bears to the total amount so allocated by all States to their housing authorities in that year.

The total housing assistance grant payable to Victoria during 1971-72 is estimated at \$1.05m.

Eradication of bovine brucellosis and tuberculosis

For a period of three years from 1 January 1969 the Commonwealth has agreed to join the States in meeting the cost of an intensified campaign for the eradication of bovine brucellosis and tuberculosis in cattle.

The Commonwealth has undertaken to match the combined expenditure of the mainland States provided that it is maintained at least at the 1968-69 level. The matching contributions will be expended on approved eradication measures in these States. In the case of Tasmania, the Commonwealth has agreed to meet all the costs associated with the campaign in excess of \$50,000 over the three year period.

Victoria received \$577,000 from this grant for 1970-71.

Investigation and measurement of water resources

From 1964-65 the Commonwealth has provided grants to the States in order to accelerate their programmes of surface water measurement and investigation of underground water resources. The surface water programme is aimed at completing a basic network of stream gauges throughout Australia; the underground investigations involve a general speeding up of the work of locating and measuring underground water resources.

For the year 1970-71 Victoria received \$420,000 from this grant.

Further information about Commonwealth payments to or for the States is set out on pages 617-21 of the *Victorian Year Book* 1966.

Revenue and expenditure

The financial transactions of the State of Victoria are concerned with (a) Consolidated Revenue, (b) Trust Funds, and (c) Loan Fund. Payments from Consolidated Revenue are made either under the authority of an annual Appropriation Act or by a permanent appropriation under a special Act.

Consolidated Revenue Fund

The following table shows, for each of the years 1965-66 to 1969-70, the Consolidated Revenue and Expenditure of Victoria, the surplus or deficit, and the accumulated deficit at the end of each year :

VICTORIA—CONSOLIDATED REVENUE FUND: REVENUE,
EXPENDITURE, SURPLUS OR DEFICIT, ETC.
(\$'000)

Year	Revenue	Expenditure	Surplus (+) or deficit (—)	Accumulated deficit at end of each year (i.e., 30 June)
1965-66	508,554	516,689	—8,135	53,269
1966-67	559,595	559,595	..	61,404
1967-68	601,328	604,122	—2,794	64,198
1968-69	664,183	666,644	—2,461	66,659
1969-70	726,900	742,282	—15,382	(a) 82,041

(a) Of this amount, \$60,259,000 was provided from the Loan Fund and \$21,782,000 from the Public Account.

Consolidated Revenue. Details of the principal sources of revenue are shown in the following table for each of the years 1965-66 to 1969-70 :

VICTORIA—CONSOLIDATED REVENUE FUND: REVENUE
(\$'000)

Source of revenue	1965-66	1966-67	1967-68	1968-69	1969-70
Taxation (a)	115,678	131,971	149,535	182,603	191,075
Business undertakings—					
Railways	99,673	104,989	98,786	100,329	105,204
Harbours, rivers, and lights	2,037	3,160	3,342	3,576	3,557
Water supply, sewerage, irrigation, and drainage	13,010	13,650	14,064	14,482	15,286
Electricity supply (interest and recoups of sinking funds, etc.)	11,051	11,965	13,057	13,897	14,868
State Coal Mine	404	392	282	167	..
Other	505	623	338	353	467
Total	126,681	134,780	129,870	132,805	139,383
Lands—					
Sales	526	402	484	690	565
Rents	1,609	1,739	1,886	1,824	1,980
Forestry	5,560	5,758	5,710	5,596	5,963
Other	959	1,074	1,064	1,237	3,785
Total	8,654	8,973	9,144	9,347	12,293
Interest, n.e.i.	20,735	22,694	24,137	26,493	29,399
Commonwealth grants—					
Financial Agreement Act	4,254	4,254	4,254	4,254	4,254
Financial assistance	191,922	208,790	228,254	250,563	280,008
Special revenue assistance	..	..	4,837	2,999	13,635
Colleges of advanced education	..	1,302	2,788	3,194	..
Water resources investigations	80	77	131	159	163
Total	196,256	214,424	240,264	261,170	298,060

VICTORIA—CONSOLIDATED REVENUE FUND : REVENUE—*continued*
(\$'000)

Source of revenue	1965-66	1966-67	1967-68	1968-69	1969-70
Commonwealth National Welfare Fund payments—					
Tuberculosis—					
Maintenance expenditure	3,013	3,240	3,181	3,228	3,163
Pharmaceutical benefits—					
Mental institutions	280	110	193	301	283
Other	630	539	863	808	1,646
Total	3,923	3,889	4,237	4,337	5,092
Fees and fines	7,754	8,983	9,834	10,729	11,582
All other (b)	28,872	33,881	34,307	36,701	40,018
Grand total	508,554	559,595	601,328	664,183	726,900

(a) For details of total taxation collections see page 624.

(b) Includes repayments of advances by Housing Commission under the Commonwealth-State Housing Agreements.

Expenditure from Consolidated Revenue. The principal items of expenditure during each of the years 1965-66 to 1969-70 are shown in the following table. Public debt charges, pensions and gratuities, and pay-roll tax have not been allotted to the respective heads of expenditure, but are shown as separate items.

VICTORIA—CONSOLIDATED REVENUE FUND : EXPENDITURE
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Public debt charges—					
Interest (including exchange)	78,994	84,942	91,690	98,993	109,115
Debt redemption	16,514	17,602	18,620	20,029	20,906
Other	431	456	464	491	489
Total	95,940	103,000	110,774	119,514	130,511
Business undertakings—					
Railways (a)	94,878	97,046	98,472	104,322	111,268
Harbours, rivers, and lights	1,395	1,459	1,686	1,589	1,774
Water supply, sewerage, irrigation, and drainage	9,419	10,079	10,572	10,838	11,971
State Coal Mine	711	697	604	404	..
Other	437	339	274	289	367
Total	106,839	109,620	111,607	117,443	125,379
Social expenditure—					
Education—					
State schools	101,533	111,540	127,171	145,375	167,172
Technical schools	23,770	27,711	33,286	39,205	43,779
Universities	10,528	12,480	13,576	16,527	18,775
Libraries, art galleries, etc.	2,412	2,763	3,034	3,617	4,095
Agricultural education, research, etc.	1,936	1,936	1,849	2,304	2,343
Other	180	365	590	327	455
Public health and recreation	7,425	8,121	8,763	9,544	10,484

VICTORIA—CONSOLIDATED REVENUE FUND: EXPENDITURE—*continued*
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Social expenditure—<i>continued</i>					
Charitable—					
Hospitals—					
General	40,650	44,800	46,305	53,354	61,541
Mental	18,506	19,819	21,254	22,732	25,170
Child welfare	4,865	5,339	5,956	6,767	7,643
Other	1,030	1,042	1,142	1,335	1,403
Law, order, and public safety—					
Justice	4,956	5,376	5,596	6,078	6,886
Police	21,038	23,009	25,024	26,488	29,958
Penal establishments	2,916	3,299	3,643	3,998	4,497
Public safety	74	62	68	83	104
Total	241,818	267,664	297,256	337,733	384,306
All other expenditure—					
Public works, n.e.i.	4,446	4,768	5,107	5,686	6,075
Lands and survey	3,775	4,094	4,281	4,453	4,848
Agriculture	5,702	6,318	6,729	7,248	8,274
Forestry	5,323	5,671	5,852	5,668	6,203
Legislature and general administration	14,755	17,069	17,206	19,375	21,484
Pensions and superannuation	11,294	12,184	13,248	14,509	16,273
Pay-roll tax	5,592	6,034	6,641	7,152	7,944
Miscellaneous (b)	21,206	23,174	25,419	27,863	30,986
Total	72,092	79,312	84,485	91,954	102,086
Grand total	516,689	559,595	604,122	666,644	742,282

(a) Excludes interest, etc., on Railways debt which is included with "Public debt charges".

(b) Includes interest and repayments of advances under the Commonwealth-State Housing Agreements.

Taxation

In this section some particulars are given of the principal taxes collected in Victoria by the State Government and the Commonwealth Government.

As mentioned on page 610 the Commonwealth Government alone exercises the right to impose customs and excise duties, and taxation on personal and company incomes. It also has exclusive access to the important sales and pay-roll taxes, although pay-roll tax was transferred to the States as from 1 September 1971. However, for the most part, the field now left to the States comprises motor taxation, stamp duties, liquor, land, lottery, racing, and entertainments taxes. Estate duties are shared between the two Governments.

In Victoria taxation collections by the State Government are allocated by statute either to Consolidated Revenue or to special funds. One of the principal items of Victorian taxation—taxes on the ownership and operation of motor vehicles—is allocated to both Consolidated Revenue and special funds. (See pages 629-30 for 1969-70 allocation.)

In the following table, particulars of taxation collected in Victoria by the State Government and the total amounts paid to Consolidated Revenue and to special funds are shown for each of the years 1965-66 to 1969-70:

VICTORIA—TAXATION COLLECTIONS

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
	\$'000	\$'000	\$'000	\$'000	\$'000
Probate duties	32,003	34,997	37,642	46,801	44,423
Land tax	19,881	21,132	20,976	21,839	22,436
Liquor tax	8,064	8,991	9,744	10,632	11,370
Lottery tax	6,294	6,410	6,085	5,990	6,504
Racing taxes	12,415	14,337	15,929	17,373	19,444
Taxes on the ownership and operation of motor vehicles—					
Vehicle registration fees and taxes	34,486	36,491	39,812	46,062	48,832
Drivers', etc., licences and fees	3,051	2,921	3,010	3,493	3,442
Stamp duty (vehicle registration)	4,844	4,896	5,436	5,976	6,688
Road transport taxes	1,651	1,773	1,770	1,813	1,887
Road maintenance contributions	6,379	6,732	7,248	7,842	8,555
Motor car third party insurance surcharges	2,271	2,388	2,497	2,605	2,735
Stamp duties n.e.i.	36,443	40,546	52,925	73,649	80,445
Licences and registration fees n.e.i.	1,280	1,386	1,683	1,958	1,966
Other taxes	502	6,725	8,398	8,991	9,712
Total	169,562	189,726	213,154	255,021	268,440
Paid to—					
Consolidated Revenue Fund	115,677	131,971	149,535	182,603	191,075
Special funds	53,884	57,754	63,619	72,418	77,364
	\$	\$	\$	\$	\$
Per head of population	53.09	58.39	64.58	76.04	78.58

Probate duties

The *Probate Duty Act* 1962 (a completely revised Act) fixed the rates of duty payable on the estates of deceased persons leaving property, whether real or personal, in the State of Victoria, and personal property wherever situate if the deceased was domiciled in Victoria at the date of death. The Act provides for discriminatory rates of duty in favour of estates passing to close relatives. Categories of beneficiaries are :

- A. Widow, widower, children under 21 years of age, wholly dependent adult children, or wholly dependent widowed mother.
- B. Children over the age of 21 years not being wholly dependent, or grandchildren.
- C. Brothers, sisters, parents.
- D. Other beneficiaries.

A brief summary of the rates of duty payable, as from 17 December 1962, according to the various types of beneficiaries, is shown in the following table :

VICTORIA—RATES OF PROBATE DUTY

On that part of the final balance which—				The rate of duty per \$1 shall be where the final balance passes to—			
				A	B	C	D
				cents in \$			
	\$						
Exceeds	1,200	Does not exceed	1,200	Nil	Nil	Nil	Nil
	3,000	but does not exceed	3,000	Nil	Nil	5	7.5
"	10,000	"	10,000	Nil	Nil	10	10
"	12,000	"	12,000	Nil	10	15	17.5
"	13,000	"	13,000	10	10	15	17.5
"	20,000	"	20,000	10	15	15	20
"	30,000	"	30,000	10	10	12.5	17.5
"	48,000	"	48,000	10	12.5	17.5	20
"	50,000	"	50,000	12.5	12.5	17.5	20
"	60,000	"	60,000	12.5	15	20	20
"	70,000	"	70,000	17.5	20	20	20
"	90,000	"	90,000	20	22.5	25	25
"	110,000	"	110,000	22.5	27.5	30	37.5
"	120,000	"	120,000	25	30	30	37.5
"	130,000	"	130,000	30	30	32.5	37.5
"	150,000	"	150,000	35	35	37.5	37.5
"	170,000	"	170,000	37.5	37.5	40	42.5
"	170,000	"	189,334 (a)	37.5	..	..	..
"	170,000	"	194,332 (b)	..	40	..	..
"	170,000	"	227,680 (c)	..	..	42.5	..
"	170,000	"	233,250 (d)	..	..	..	45
When the final balance exceeds (a), (b), (c), or (d), then the whole of the final balance is subject to a duty of				\$22.50 per \$100	\$25.00 per \$100	\$30.00 per \$100	\$33.00 per \$100

Commonwealth estate duty

The Commonwealth Government also levies duties on deceased estates. The amount of duty collected throughout Australia during each of the five years to 1969–70 was: 1965–66, \$36,124,380; 1966–67, \$41,533,748; 1967–68, \$54,716,655; 1968–69, \$60,725,780; 1969–70, \$71,332,453.

Land tax

The *Land Tax Act* 1928 provided for a tax on the unimproved value of land in Victoria. For the purpose of this Act, unimproved value is the estimated selling value of the land assuming that improvements, if any, had not been made.

Under the provisions of the *Land Tax Act* 1968, which came into force on 1 January 1969, land used for primary production purposes is exempted from land tax.

As provided by the *Land Tax Act* 1970 land not used for primary production purposes is taxed at the rate of 0.42 cents in the dollar on the unimproved value up to \$17,500 with a graduated increase in the rate to reach 3.21 cents in the dollar where the unimproved value exceeds \$170,000. The Act also provided for an increase in the amount of exemption from land tax. As from 1 January 1971 tax is not levied on land with unimproved value up to \$9,000, while a partial exemption is allowed on land valued between \$9,000 and \$13,500.

The following table shows particulars, in specified groups of unimproved value of holdings, of land tax assessments for 1969. Tax was assessed on the basis laid down by the *Land Tax (Rates) Act* 1967.

VICTORIA—STATE LAND TAX ASSESSMENTS, 1969
(Based on unimproved value at 31 December 1968)

Unimproved value of holdings—	Number of taxpayers	Total unimproved value (a)	Tax payable
\$		\$'000	\$'000
6,001 to 7,000	18,287	119,719	123
7,001 „ 8,000	12,328	95,401	230
8,001 „ 9,000	7,713	65,672	241
9,001 „ 10,000	5,771	54,624	223
10,001 „ 12,000	8,014	88,418	360
12,001 „ 14,000	5,155	66,237	266
14,001 „ 16,000	3,594	53,698	217
16,001 „ 17,500	2,051	34,718	140
17,501 „ 20,000	2,605	48,718	202
20,001 „ 30,000	5,195	125,429	627
30,001 „ 40,000	2,162	74,788	484
40,001 „ 50,000	1,064	47,693	353
50,001 „ 60,000	646	35,415	294
60,001 „ 70,000	417	27,046	252
70,001 „ 80,000	324	24,227	248
80,001 „ 100,000	443	39,465	453
100,001 „ 150,000	533	64,944	934
150,001 „ 170,000	126	20,371	362
170,001 „ 200,000	133	24,464	479
200,001 „ 300,000	212	51,695	1,159
300,001 „ 400,000	112	38,865	992
400,001 „ 1,000,000	185	109,560	2,981
1,000,001 and over	88	256,362	8,380
Total	77,158	1,567,532	20,000

(a) Of land not exempted from land tax.

In the following table details are shown of the assessments made during each of the years 1965 to 1969. The exemption from tax of land used for primary production purposes as from 1 January 1969, and increases from time to time in the amount of exemption from tax of land used for other purposes is mainly responsible for the fluctuations in the figures shown in the table.

VICTORIA—STATE LAND TAX ASSESSMENTS

Year	Number of taxpayers	Total tax payable	Average tax payable per taxpayer	Total unimproved value (a)
		\$'000	\$	\$'000
1965	89,922	18,686	207.81	1,784,974
1966	98,760	20,397	206.53	1,953,974
1967	100,471	20,585	204.88	2,064,136
1968	104,500	21,261	203.45	2,160,795
1969	77,158	20,000	259.21	1,567,532

(a) Of land not exempted from land tax.

Liquor tax

The Liquor Control Commission, established under the provisions of the *Liquor Control Act* 1968, controls the issue of liquor licences in Victoria. The principal sources of taxation are the fees received for liquor licences and club certificates. All receipts of the Commission are paid into

the Licensing Fund. After payments have been made to municipalities and the Police Superannuation Fund, and costs for compensation, administration, etc., have been met, the excess of receipts is transferred each year from the Licensing Fund to Consolidated Revenue.

VICTORIA—LIQUOR TAX

(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Licences—					
Victuallers	5,836	6,543	7,272	7,706	8,090
Spirit merchants and grocers	1,603	1,814	1,820	2,158	2,415
Others	83	83	88	164	176
Club certificates	387	405	400	433	489
Permits—extended hours, etc.	122	114	129	134	165
Fees	32	31	34	37	36
Total	8,064	8,991	9,744	10,632	11,371

Lottery tax

With the object of providing additional finance for hospitals and other charitable institutions, the trustees of the will and estate of the late George Adams, founder of Tattersall's Consultations, were granted a licence to promote and conduct sweepstakes in Victoria in accordance with the provisions of the *Tattersall Consultations Act 1953*.

The Act provides that, within seven days after the drawing of each consultation, duty equivalent to 31 per cent of the total amount of subscriptions to the consultation shall be paid to Consolidated Revenue. Each year an equivalent amount is paid out of Consolidated Revenue, in such proportions as the Treasurer determines, into the Hospitals and Charities Fund and the Mental Hospitals Fund.

In the following table, the amounts subscribed to consultations, the duty paid to Consolidated Revenue, and the amounts allocated to the Hospitals and Charities Fund and the Mental Hospitals Fund, are shown for each of the years 1965-66 to 1969-70 :

VICTORIA—TATTERSALL LOTTERIES : SUBSCRIPTIONS, DUTY PAID, ETC.
(\$'000)

Year	Subscriptions to consultations	Duty paid to Consolidated Revenue	Allocated to—	
			Hospitals and Charities Fund	Mental Hospitals Fund
1965-66	20,396	6,294	5,994	300
1966-67	20,580	6,410	6,000	410
1967-68	19,420	6,085	5,585	500
1968-69	19,440	5,990	5,375	615
1969-70	21,400	6,504	5,684	820

Racing taxes

The principal taxes levied on racing in Victoria are the percentage deducted from investments on the totalisator, the turnover tax on bookmakers' holdings, stamp duty on betting tickets, and tax on admissions to race meetings.

A deduction of 13 per cent is made from all on-course investments on the totalisator at horse races (including trotting) and at dog races. In the case of city racing clubs, the percentage deducted is divided as follows : doubles and quinella investments, 5 per cent to revenue and 8 per cent to the club; win and place investments, 8 per cent to revenue and 5 per cent to the club. In respect of country race meetings, 3 per cent of total investments is paid to revenue and 10 per cent to the club.

Under the provisions of the *Racing Totalizators Extension Act 1960*, off-course betting is permitted on race-course totalisators. The Totalizator Agency Board, appointed under the Act, conducts the off-course betting scheme which came into operation on 11 March 1961.

From investments on the off-course totalisator the following commission is deducted :

1. From any daily double investments with respect to horse races and trotting races (other than feature doubles)—14 per cent.
2. From all other investments—13 per cent.

The commission deducted is allocated in the following proportions :

1. From all off-course investments—
 - (a) to Consolidated Revenue—4½ per cent.
 - (b) to the Totalizator Agency Board Trust Account (held at State Treasury)—¼ per cent.
 - (c) to the Totalizator Agency Board to be expended in terms of the *Racing Act 1958*—8 per cent.
2. From any daily double investments on horse races and trotting races (other than feature doubles)—to the Race-courses Development Fund (held at State Treasury)—1 per cent. This Fund was instituted on 1 July 1968 by the *Racing (Amendment) Act 1968*.

VICTORIA—TOTALISATOR INVESTMENTS, INVESTMENTS WITH
LICENSED BOOKMAKERS, AND TOTAL RACING TAXATION
(\$'000)

Year	Totalisator investments		Investments with licensed book-makers (a)	Racing taxation			
	On-course	Off-course		Totalisator	Book-makers' turnover	Other (b)	Total
1965-66	34,828	129,109	160,453	8,686	2,921	809	12,415
1966-67	36,627	143,984	168,381	10,447	3,058	833	14,337
1967-68	37,383	162,870	172,603	11,969	3,132	829	15,929
1968-69	39,085	185,869	172,388	13,410	3,117	845	17,373
1969-70	43,259	202,733	183,296	15,240	3,301	903	19,444

(a) Estimated.

(b) Includes entertainments (admission) tax, stamp duty on betting tickets, and club and bookmakers' licences, etc.

The *Racing (Interstate Totalizators) Act 1964* empowered the Totalizator Agency Board, with the approval of the Minister, to enter into any agreement or arrangement for the provision of off-course totalisator facilities in any other State or Territory of the Commonwealth where such facilities may be provided.

Government receipts from the totalisator, including fractions and

unclaimed dividends, are specially appropriated to the Hospitals and Charities Fund.

Entertainments tax

As from 29 December 1962 entertainments tax is levied in Victoria only on admissions to horse racing and trotting meetings. The amount of tax collected during each of the five years to 1969-70 was as follows: 1965-66, \$502,000; 1966-67, \$519,685; 1967-68, \$522,796; 1968-69, \$530,139; 1969-70, \$569,311.

Further reference, 1971

Taxes on the ownership and operation of motor vehicles

VICTORIA—TAXES ON THE OWNERSHIP AND OPERATION OF MOTOR VEHICLES (\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
VEHICLE REGISTRATION FEES AND TAXES					
Country Roads Board Fund—					
Motor registration fees, etc.	24,581	25,914	27,302	29,300	31,062
Additional registration fees (part)	1,505	1,587	1,703	1,849	2,034
Level Crossings Fund—					
Additional registration fees (part)	752	793	851	924	1,017
Road (Special Projects) Fund—					
Increase in registration fees (Act No. 7283)	7,637	8,185	9,944	13,979	14,708
Transport Regulation Fund—					
Motor omnibus registration fees	12	12	12	10	10
Total	34,486	36,491	39,812	46,062	48,832
DRIVERS, ETC., LICENCES AND FEES					
Consolidated Revenue Fund—					
Drivers licence fees (part)	1,421	1,356	1,380	1,613	1,574
Country Roads Board Fund—					
Drivers licence fees (part)	731	693	712	828	810
Drivers test fees	185	194	223	243	268
Municipalities Assistance Fund—					
Drivers licence fees (part)	715	677	695	809	790
Total	3,051	2,921	3,010	3,493	3,442
STAMP DUTY (VEHICLE REGISTRATION)					
Consolidated Revenue Fund	4,844	4,896	5,436	5,976	6,688
ROAD TRANSPORT TAXES					
Country Roads Board Fund—					
Sale of log books	..	5	22	11	11
Transport Regulation Fund—					
Licences, etc.	833	918	873	909	943
Permits	818	850	875	892	934
Total	1,651	1,773	1,770	1,813	1,887
ROAD MAINTENANCE CONTRIBUTIONS					
Country Roads Board Fund—					
Road charges under Commercial Goods Vehicles Act	6,379	6,732	7,248	7,842	8,555

VICTORIA—TAXES ON THE OWNERSHIP AND OPERATION
OF MOTOR VEHICLES—*continued*
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
MOTOR CAR THIRD PARTY INSURANCE SURCHARGES					
Consolidated Revenue Fund	2,271	2,388	2,497	2,605	2,735
TOTAL					
Consolidated Revenue Fund	8,536	8,640	9,313	10,194	10,997
Country Roads Board Fund	33,381	35,125	37,210	40,073	42,740
Level Crossings Fund	752	793	851	924	1,017
Municipalities Assistance Fund	715	677	695	809	790
Road (Special Projects) Fund	7,637	8,185	9,944	13,979	14,708
Transport Regulation Fund	1,663	1,780	1,760	1,811	1,887
Total	52,682	55,201	59,772	67,789	72,139

NOTE. Deductions from third party insurance premiums—credited to the Motor Car (Hospital Payments) Fund in 1965-66 and to the Hospitals and Charities Fund in following years—are now included in "other taxes" and amounted to \$202,000 in 1965-66, \$679,000 in 1966-67, \$1,745,000 in 1967-68, \$1,837,000 in 1968-69, and \$1,929,000 in 1969-70.

Stamp duties

Under the provisions of the *Stamps Act* 1958 and subsequent amendments thereto, stamp duty is imposed in Victoria on a wide range of legal and commercial documents.

The rates of duty payable, as from 1 January 1972, on the principal dutiable classes of documents, etc., are shown in the following table:

Dutiable class	Duty payable
BILLS OF EXCHANGE—	
Payable on demand (cheque, etc.)	6c
Others (including promissory notes) not above \$50	5c
to \$100	10c
to \$150	15c
to \$200	20c
for extra \$100 or part	10c
SHARE TRANSFERS—On sale for full value—	
Based on consideration	Up to \$100—per \$25 or part 14c
	over \$100—per \$100 or part 60c
TRANSFER OF REAL PROPERTY—Based on	For each \$100 or part—
consideration	\$
	up to 7,000 1.50
	over 7,000 to 15,000 1.75
	" 15,000 " 100,000 2.00
	" 100,000 " 500,000 2.25
	" 500,000 " 1,000,000 2.50
	" 1,000,000 3.00
LEASES AND ASSIGNMENTS OF LEASES OF REAL PROPERTY	variable scale according to nature
INSURANCE COMPANIES (OTHER THAN LIFE)	each \$200 (or part) of annual premium income
—Annual licences	\$12
LIFE ASSURANCE POLICIES—On the sum insured	
	up to \$2,000—per \$200 or part 10c
	over \$2,000—\$1 for first \$2,000 plus per \$200 or part of remainder 20c
POWER OF ATTORNEY OR APPOINTMENT OF AGENT	\$2
INSTALMENT PURCHASE (including hire purchase)	Purchase price \$20 or more 1.8%

Dutiable class— <i>continued</i>	Duty payable— <i>continued</i>		
	\$	\$	%
GIFTS AND SETTLEMENTS	up to 2,000		2½
	over 2,000 to 10,000		3½
	" 10,000 " 20,000		4½
	" 20,000 " 30,000		5½
	" 30,000 " 40,000		6½
	" 40,000 " 50,000		7½
	" 50,000 " 60,000		8½
	" 60,000 " 70,000		9½
	" 70,000 " 80,000		10½
	" 80,000 " 100,000		11½
	" 100,000 " 150,000		14½
	" 150,000 " 200,000		19½
" 200,000		22	
MORTGAGES, BONDS, DEBENTURES AND COVENANTS—On amount secured	up to \$8,000		\$4
	up to \$10,000—\$4 for first \$8,000 plus per \$200 or part of remainder		60c
	over \$10,000—\$10 for first \$10,000 plus per \$200 or part of remainder		70c
CREDIT AND RENTAL BUSINESS	Based on amount of credit, etc., or rental		1.8%
GUARANTEES AND INDEMNITIES			50c
OTHER AGREEMENTS AND INSTRUMENTS—			
Partnerships, sale of business, etc.			\$3 each
Caveats			
Licence to use real property, etc.			
Transfer of mortgage			
Discharge of mortgage of real property			
Discharge of mortgage of personal property (other than of a life policy)			
Appointment of trustee			
Discharge of mortgage of a life policy			50c
DEEDS—not otherwise chargeable			\$3
MOTOR CAR—			
On every application for registration and every notice of acquisition of a motor car or trailer—			
For every \$200 and part of \$200 of the market value of such motor car or trailer			\$3
STATEMENT ON SALE OF CATTLE OR SWINE—			
(i) Cattle Statement			
For every \$5 and part of \$5			
(a) of the amount of the purchase money in respect of one head of cattle sold singly; or			2c
(b) of the total amount of the purchase money in respect of any number of cattle sold in one lot			
Provided that the stamp duty in respect of the amount of the purchase money of any one head of cattle, whether sold singly or as part of a lot, shall not exceed 20 cents.			
(ii) Swine Statement			
For every \$5 and part of \$5			
(a) of the amount of the purchase money in respect of one pig sold singly; or			4c
(b) of the total amount of the purchase money in respect of any number of pigs sold in one lot			
Provided that the stamp duty in respect of the amount of the purchase money of any one pig, whether sold singly or as part of a lot, shall not exceed 32 cents.			

NOTE. Exemptions from duty are allowed in certain specific cases.

Commonwealth income tax

Uniform taxation on incomes throughout Australia was adopted in 1942 when the Commonwealth Government became the sole authority levying this tax.

The tax, which is imposed on both individuals and companies, was known as "Income Tax and Social Services Contribution" until December 1965, when the citation of the Act was altered. Since that date the levy has been referred to as "Income Tax".

Certain types of income are exempt from tax in Australia. These include income from gold mining and uranium mining; war, invalid, age, and widows pensions; child endowment; and unemployment and sickness benefits. The service pay of members of the defence forces engaged in war service in Borneo and Vietnam is also exempt from tax.

Expenses incurred in earning income and losses incurred in previous years are allowable deductions.

For the income year 1970-71 income tax is payable on the incomes of individuals commencing at a taxable income of \$417. However, certain limitations apply to the tax payable by aged persons, over 65 years of age in the case of a male and over 60 years in the case of a female.

Concessional deductions are allowed to taxpayers on account of dependants, certain medical and dental expenses, life insurance premiums, superannuation contributions, medical or hospital benefit fund payments, education expenses, etc., and are deductible from income to calculate taxable income. Dependants include spouse, parents, parents-in-law, children under sixteen years of age, student children under 21 years of age, invalid child, brother or sister over sixteen years of age, or daughter-housekeeper for widow or widower. A concessional deduction may be allowed for a housekeeper having the care of children under sixteen years of age or of an invalid relative where the taxpayer did not contribute to the maintenance of a spouse or daughter-housekeeper. The amount of concessional deduction allowable in respect of each type of dependant and housekeeper is:

	\$
Spouse	312
Parent or parent-in-law	312
Child under sixteen years of age—	
One child	208
Other children	156 each dependant
Student child 16 to 21 years of age	208 each dependant
Invalid relative not less than sixteen years of age	208 each dependant
Housekeeper or daughter-housekeeper	312

AUSTRALIA—RATES OF INCOME TAX FOR INDIVIDUALS, 1970-71 (a)

Total taxable income—		Tax on amount in Column 1	Tax on each \$1 of balance of income
Column 1 exceeding—	Column 2 not exceeding—		
\$	\$	\$	cents
Nil	200	Nil	0.3
200	300	0.60	1.2
300	400	1.80	2.7
400	500	4.50	4.1
500	600	8.60	5.5
600	800	14.10	7.4
800	1,000	28.90	9.7
1,000	1,200	48.30	11.3
1,200	1,400	70.90	12.8
1,400	1,600	96.50	14.3
1,600	1,800	125.10	15.8
1,800	2,000	156.70	17.3
2,000	2,400	191.30	19.5
2,400	2,800	269.30	22.1
2,800	3,200	357.70	24.4
3,200	3,600	455.30	26.7
3,600	4,000	562.10	28.8
4,000	4,800	677.30	31.9
4,800	5,600	932.50	34.5
5,600	6,400	1,208.50	37.0
6,400	7,200	1,504.50	39.4
7,200	8,000	1,819.70	41.7
8,000	8,800	2,153.30	43.9
8,800	10,000	2,504.50	46.5
10,000	12,000	3,062.50	50.6
12,000	16,000	4,074.50	56.4
16,000	20,000	6,330.50	62.4
20,000	..	8,826.50	66.7

(a) Additional tax equal to 2½ per cent of the tax at general rates is also payable for the 1970-71 financial year.

Income tax is payable on the whole of a person's taxable income if that income exceeds \$416.

Special concessional rates apply to incomes of \$417-\$429.

A deduction is available to individuals who reside in certain remote areas of the Commonwealth or its Territories, and to members of the defence forces who serve in certain overseas localities.

A system is in operation to assist the majority of taxpayers in the payment of their taxes by means of regular deductions from salaries or wages. The amounts deducted are regulated so that the employee will have paid the approximate amount of his taxation by the end of the income year.

The following table shows the number of taxpayers, taxable income, and income tax assessed during the year 1969-70 (based on incomes

received during the year 1968-69). The particulars are classified according to grades of actual income and relate only to individuals resident in Victoria.

VICTORIA—INCOME TAX : INDIVIDUALS, 1969-70 (a)

Grade of actual income (b)	Taxpayers	Taxable income			Net income tax assessed
		Salaries and wages	Other	Total	
\$	number	\$'000	\$'000	\$'000	\$'000
417- 599	37,866	15,680	3,009	18,689	402
600- 799	47,434	25,285	5,267	30,552	970
800- 999	45,922	30,840	6,966	37,805	1,695
1,000- 1,199	52,692	42,964	9,273	52,237	2,941
1,200- 1,399	60,828	58,216	11,882	70,099	4,626
1,400- 1,599	67,601	73,987	16,246	90,233	6,871
1,600- 1,799	72,692	91,091	18,423	109,514	9,400
1,800- 1,999	73,817	103,018	20,953	123,971	11,742
2,000- 2,199	73,909	112,167	23,323	135,490	13,952
2,200- 2,399	72,189	119,143	23,947	143,090	15,843
2,400- 2,599	70,539	123,407	25,105	148,512	17,350
2,600- 2,799	71,045	131,478	26,085	157,563	19,314
2,800- 2,999	69,071	137,662	26,085	163,748	21,168
3,000- 3,999	305,584	717,079	122,941	840,021	122,849
4,000- 5,999	254,361	769,784	171,257	941,041	173,617
6,000- 7,999	62,190	229,293	98,272	327,564	77,216
8,000- 9,999	19,788	78,654	60,843	139,497	39,247
10,000-19,999	21,453	94,899	139,621	234,520	85,736
20,000-29,999	2,856	17,128	42,628	59,756	28,600
30,000-39,999	782	6,489	17,015	23,504	12,476
40,000-59,999	378	3,930	12,112	16,043	9,188
60,000-99,999	143	1,620	7,462	9,082	5,453
100,000 and over	70	710	9,281	9,991	6,372
Total	1,483,210	2,984,526	897,995	3,882,521	687,029

(a) Includes 6,456 taxpayers, resident in Victoria, who derived income from more than one State.

(b) Actual income is defined briefly as "Gross income, including exempt income, less expenses incurred in gaining that income".

Withholding tax

A flat rate of tax has been levied on dividends derived by non-residents of Australia from Australian companies since 1 July 1960. In 1967 the income tax legislation was amended to provide also for a flat rate of tax on interest derived by non-residents of Australia from Australian residents on or after 1 January 1968. The rate of tax on dividends is 30 per cent, except for dividends paid to residents of countries with which an agreement for the relief of double taxation has been completed, i.e., United Kingdom, Canada, New Zealand, United States of America, Singapore, and Japan, in which case the rate is 15 per cent. The rate of tax on interest is 10 per cent for residents of all countries.

Company tax

The following table shows the rates of income tax payable by companies for the financial year 1970-71 (income year 1969-70) :

**AUSTRALIA—RATES OF INCOME TAX PAYABLE
BY COMPANIES, 1970-71**

Type of company	Taxable income	
	1st \$10,000— Rate per cent	Balance— Rate per cent
Private (a)	32.5	42.5
Public—		
Co-operative	37.5	47.5
Life assurance—		
Mutual	32.5	42.5
Other life assurance—		
Resident—		
Mutual income	32.5	42.5
Other income	(b)42.5	47.5
Non-resident—		
Mutual income	32.5	42.5
Dividend income	(b)37.5	47.5
Other income	(c)42.5	47.5
Non-profit—		
Friendly society dispensary	37.5	37.5
Other	37.5	47.5
Other—		
Resident	42.5	47.5
Non-resident—		
Dividend income	37.5	47.5
Other income	(d)42.5	47.5

(a) Further tax at 50 per cent payable on undistributed amount.

(b) Maximum income subject to this rate is \$10,000 less mutual income.

(c) Maximum income subject to this rate is \$10,000 less the sum of the mutual and dividend income.

(d) Maximum income subject to this rate is \$10,000 less dividend income.

State pensions and gratuities

The following table shows details of State Government expenditure on pensions, gratuities, etc., during each of the years 1965-66 to 1969-70:

**VICTORIA—GOVERNMENT EXPENDITURE ON PENSIONS,
GRATUITIES, ETC.
(\$'000)**

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
State Superannuation Fund—					
Railways	4,945	5,073	5,273	5,451	5,724
Other	5,618	6,357	7,257	8,443	9,624
Total State Superannuation Fund	10,562	11,431	12,530	13,894	15,348
Police Pensions Fund	380	380	380	380	380
Police Superannuation Fund	150	116	54	6	5
Coal Mine Workers Pensions Fund	136	139	105	30	54
Parliamentary Contributory Retirement Fund (a)	104	105	103	42	..
Parliamentary Contributory Superannuation Fund	..	..	..	44	352
Married Women's Superannuation Fund	..	..	..	28	2
Married Women Teachers Pensions Fund (b)	44	48	42	..	..
Other pensions, gratuities, etc.	63	77	85	86	132
Grand total	11,440	12,295	13,299	14,509	16,273

(a) Fund closed and replaced by Parliamentary Contributory Superannuation Fund which came into operation on 1 December 1968 (see pages 638-9).

(b) Fund closed and replaced by Married Women's Superannuation Fund as from 1 February 1969 (see page 639).

State Superannuation Fund

This Fund was established under the *Superannuation Act* 1925 to provide superannuation benefits, on a contributory basis, for public servants, teachers, railway employees, and employees of certain statutory bodies. The scope of the Fund was widened by amending legislation in 1963 to include, *inter alia*, members of the Police Force of Victoria (see Police Pensions Fund, page 637), and in 1966, 1967, and 1968 amending Acts considerably increased the range of benefits available.

The main provisions of the Act current at 19 December 1969 were summarised in the *Victorian Year Book* 1970 (pages 664-5). Further amending Acts in December 1969 and in 1970 introduced a number of changes including the following :

1. Liberalisation of right to convert part of pension entitlement to a lump sum.
2. The rate of pension for a child of a deceased contributor or pensioner was raised to \$208 per annum, provided that where both parents are deceased the amount is increased to \$416.

VICTORIA—STATE SUPERANNUATION FUND

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Receipts—	\$'000	\$'000	\$'000	\$'000	\$'000
Contributions—					
Officers	8,332	13,333	14,297	16,278	18,725
Consolidated Revenue (a)	10,517	11,376	12,436	13,818	15,244
Interest	5,547	6,237	6,907	7,790	8,687
Transferred from Police Pensions Fund	(b) 4,719	..	..	..	..
Other	204	118	94	28	192
Total	29,319	31,064	33,734	37,914	42,848
Disbursements—					
Pension payments	13,918	14,990	16,203	17,772	19,369
Lump sum payments	86	2,271	2,893	3,549	4,737
Contributions refunded	1,062	1,218	1,399	1,686	2,034
Transfer to Pensions Supplementation Fund	..	909	1,028	1,057	2,175
Other	6	2	35	13	32
Total	15,071	19,390	21,558	24,077	28,347
Balance in Fund at 30 June	112,584	124,258	136,435	150,272	164,773
Contributors at 30 June—	number	number	number	number	number
Males	(c) 44,400	(c) 45,200	45,911	(c) 46,700	(c) 47,000
Females	(c) 8,050	(c) 8,070	8,087	(c) 8,100	(c) 9,819
Total	(c) 52,450	(c) 53,270	53,998	(c) 54,800	(c) 56,819
Pensioners at 30 June—					
Ex-employees—					
Males	8,415	(c) 8,440	8,464	8,583	8,829
Females	1,541	(c) 1,600	1,662	1,752	1,853
Widows	7,093	(c) 7,240	7,397	7,533	7,744
Children	889	(c) 940	988	1,054	1,094
Total	17,938	(c) 18,220	18,511	18,922	19,520

(a) These figures do not agree with those shown on page 635, as the latter include Consolidated Revenue's share of pensions accrued at the end of each year.

(b) Includes accrued interest \$262,000.

(c) Estimated.

3. A contributor over the age of 54 years who is contributing at least 12 per cent of his gross salary (other than in respect of deferred payments, for optional units, or reserve units) to the Fund may elect to contribute for units to which he becomes entitled at a reduced rate of contribution, being one quarter of the normal rate. The Fund's share of pension for each such unit will be \$6.50 per annum, i.e., one quarter of its normal share. The Government's share of pension, however, will not be reduced but will remain at \$65 per unit per annum.

Police Pensions Fund

This Fund was established by the *Police Pensions Act* 1923 which came into operation on 1 January 1924, and applied to all members who joined the Police Force on or after 25 November 1902. This legislation was embodied in the *Police Regulation Act* 1958, consolidating the law dealing with the Police Force in Victoria. A further amending Act was passed in December 1958.

The *Superannuation Act* 1963 amended the *Superannuation Act* 1958 and the *Police Regulation Act* 1958 and provided that all new entrants to the Police Force on and after 1 February 1964 would be required to contribute to the State Superannuation Fund, and that existing members at that date could either remain as contributors to the Police Pensions Fund or elect to transfer to the State Superannuation Fund. The 1963 Act also provided for an actuarial investigation of the Police Pensions Fund and for the transfer of any surplus disclosed to the Consolidated Revenue.

The receipts of the Police Pensions Fund during 1969-70 amounted to \$1,119,629, comprising deductions from pay, \$54,391, special appropriation from Consolidated Revenue, \$380,000, and interest on investments, \$685,238. During the year, \$1,495,812 was paid in pensions, \$28,183 in gratuities, \$11,692 was returned to contributors on resignation, and \$306 was paid to the State Superannuation Fund. The balance in the Fund at 30 June 1970 was \$12,735,005. Of this amount, \$12,665,500 was invested in government and semi-government securities.

The number of contributors to the Fund at 30 June 1970 was 398 males and three females.

Police Superannuation Fund

Pensions are payable out of this Fund on account of those who joined the Police Force prior to 25 November 1902.

The receipts of the Fund are made up of contributions from the State, damages awarded to members of the Police Force, certain penalties, and a statutory annual contribution from the Licensing Fund. Police contributions to the Fund ceased in 1940-41.

During the year 1969-70 the total receipts from all sources amounted to \$5,289, while pension payments totalled \$13,125. The balance in the Fund at 30 June 1970 was \$13,019.

Pensions Supplementation Fund

This Fund was established pursuant to the *Pensions Supplementation Act* 1966, to meet the cost of supplementing, as from 1 April 1966, the

pensions of officers who retired on or before 1 April 1966 or the widows of such officers or of those officers who died before that date.

The scheme was reviewed at the end of 1969 to provide further supplementation of pensions with increases ranging up to 24 per cent for pensions to persons retired before August 1961, and with appropriate smaller increases for those whose pensions commenced at later dates.

Total income of the Fund during 1969-70 was \$2,330,975, made up of statutory transfers from the State Superannuation Fund, \$2,277,110, interest on investments, \$51,982, and other income \$1,883, while expenditure on pensions totalled \$2,642,526. At 30 June 1970 the net assets of the Fund were \$805,722.

Coal Mine Workers Pensions Fund

The *Coal Mine Workers Pensions Act* 1942 and subsequent legislation defined contributions and benefits in connection with the Coal Mine Workers Pensions Fund. Contributions to the Fund were payable by the State Government, the State Coal Mine, and by mine workers. With the passing of the *State Coal Mines (Winding Up) Act* 1968 (operative from 1 January 1969) and the consequent closure of the State Coal Mine, contributions to the Fund by the State Coal Mine and by mine workers ceased, the State Government henceforth being the only contributor. The winding up Act allowed early retirement for certain mine workers approaching retiring age at 1 January 1969. Benefits to these and other retired mine workers and their dependants will continue to be paid from the Fund. At 30 June 1970 the net assets of the Fund amounted to \$926,551.

Parliamentary Contributory Superannuation Fund

This Fund was established under the authority of the *Parliamentary Salaries and Superannuation Act* 1968, which came into operation on 1 December 1968. Under the Act the amounts standing to the credit of the Parliamentary Contributory Retirement Fund, established under *The Constitution Act Amendment Act* 1958, and the Parliamentary Superannuation Fund, established under the *Parliamentary Contributory Superannuation Act* 1962, were paid into the new Fund.

On 22 April 1969 the *Parliamentary Salaries and Superannuation (Administration) Act* 1969 transferred responsibility for the administration of the Parliamentary Contributory Superannuation Fund from the Treasury to the State Superannuation Board of Victoria.

The Act provides that male members contribute to the Fund at the rate of 11½ per cent (female rate 10 per cent) of the gross amount of each salary instalment.

Every person who has ceased to be a member and has served as a member for at least fifteen years or, in certain circumstances, for at least eight years, is entitled to be paid out of the Fund a pension which is determined in accordance with a formula set out in the Act. The formula takes into account length of service and amount of salary at date of retirement.

Provision is also made for payments of certain sums to ex-members who do not fulfil the conditions necessary for a pension. The widow of a

deceased member or ex-member is also entitled to receive a pension calculated according to a formula laid down in the Act.

During 1969-70 receipts of the Fund totalled \$492,965, made up of members' contributions, \$112,686, contribution from Consolidated Revenue, \$351,700, and interest on investments, \$28,579. Pension payments and retiring allowances totalled \$415,546 and other expenditure amounted to \$30,793.

The balance in the Fund on 30 June 1970 was \$475,094 of which \$425,000 was invested.

Married Women's Superannuation Fund

The *Married Women's Superannuation Fund Act* 1968, proclaimed on 1 February 1969, established the Married Women's Superannuation Fund to which was credited the balance in the former Married Women Teachers Pensions Fund which ceased to exist as from 31 January 1969.

Teachers who were contributing to the Married Women Teachers Pensions Fund automatically became contributors to the Married Women's Superannuation Fund, and a married woman employed on the permanent staff of any department or body whose officers contribute to the State Superannuation Fund may elect to become a contributor to the Fund provided she is not contributing to the State Superannuation Fund.

On retirement after attaining the age of 60 years, a contributor is entitled to receive a lump sum payment or she may convert all or part of the lump sum entitlement to an annuity payment. A contributor retiring on account of ill health is entitled only to a lump sum payment.

The balance in the Fund at 30 June 1970 was \$1,064,801.

Commonwealth Superannuation Fund

The Commonwealth Superannuation Scheme established under the provisions of the *Superannuation Act* 1922 provides pensions on retirement for officers and employees of the Commonwealth and certain authorities of the Commonwealth, and for their widows or dependent widowers and children. On retirement, contributors are entitled to \$91 per annum in respect of each unit contributed for and contributions of members provide \$26 of this. Each widow is entitled to a pension equal to a minimum of one half or a maximum of five eighths of that for which her husband was contributing or (if a pensioner) receiving. A pension of \$208 per annum is paid in respect of each child under sixteen years, or up to 21 years for children undergoing full-time education, of a married contributor or pensioner on his death. For orphan children a minimum of \$520 per annum is paid.

By an amending Act which came into operation on 4 June 1969 provision was made to enable any member under certain conditions to accept as, or convert to, non-contributory those units to which he or she has become entitled. On retirement (at age 65) or previous invalidity the amount payable for each unit is then only the Consolidated Revenue proportion (\$65 a year). Widows are entitled to pro rata payment in respect of non-contributory units.

In addition to the pension scheme, a Provident Account, established in 1937, provides a lump sum benefit to employees who, for various reasons, cannot become contributors for pension benefits. Contributions to the Provident Account are at the rate of 5 per cent of salary. The benefit payable is the total of the contributions actually paid plus compound

interest, multiplied by three, or an amount equal to one half of annual salary, if greater.

At 30 June 1970 there were 160,689 contributors to the Superannuation Fund and 18,498 to the Provident Account, while the number of pensions in the force was 27,601. At the same date, the balance of the Fund, a trust fund held at the Commonwealth Treasury, was \$413.7m.

State trust funds and special accounts

Under the provisions of The Constitution Act, revenues of the State are payable to Consolidated Revenue with the exception of certain revenues which have been set aside by various Acts of Parliament for specific purposes and are payable into special funds or accounts kept at the State Treasury. Numerous funds or accounts consisting of moneys collected for, or held for expenditure on behalf of, the Commonwealth Government, moneys provided for specified purposes by outside bodies, and amounts held in trust for government departments and for other accounts are also included in trust funds. The balances of all funds or accounts are held by way of investment or on general account and the operations of many are regulated by statute.

The transactions recorded annually are numerous and of considerable magnitude. During 1969-70 the debits of all trust funds or accounts amounted to \$766.2m, while credits totalled \$778.2m.

At 30 June 1970 the liability of the State on account of all trust funds or accounts amounted to \$156.1m. Of this total, \$70.0m was invested in Commonwealth stock or other securities, and cash advanced totalled \$27.2m. The balance—\$58.9m—was at the credit of the Public Account.

Expenditure from Loan Fund

In addition to the ordinary expenditure from revenue, certain sums are disbursed annually for various purposes from the Loan Fund and on account of loan. Details of such expenditure for each of the years 1965-66 to 1969-70 are shown in the following table. The total expenditure from all sources to 30 June 1970, regardless of whether the loans have been repaid or are still in existence, was \$2,782m.

The figures in the table on the following page do not include discounts and flotation expenses on loans for works and redemption purposes, particulars of which are as follows: 1965-66, \$1,036,344; 1966-67, \$817,319; 1967-68, \$1,099,684; 1968-69, \$748,582; 1969-70, \$554,651. The aggregate expenditure to 30 June 1970 was \$39,475,580.

**VICTORIA—EXPENDITURE FROM LOAN FUND AND ON
ACCOUNT OF LOAN
(\$'000)**

Expenditure on—	1965-66	1966-67	1967-68	1968-69	1969-70
Public works—					
Railways	16,220	16,336	16,541	16,863	16,135
Roads and bridges	2,390	1,672	1,841	4,476	1,778
Harbours and rivers	3,453	2,906	1,886	4,432	2,687
Water supply	17,953	18,280	18,380	18,156	24,519
Sewerage	986	966	1,166	1,754	1,173
Electricity supply	15,000	15,500	14,500	15,750	19,250
Gas and Fuel Corporation	60	60	70	80	40
Public buildings—					
Schools, etc.	31,900	35,928	39,718	42,192	45,616
Hospitals, etc.	16,752	16,964	17,336	17,260	18,694
Other	9,834	13,049	13,297	11,440	11,167
Municipalities—loans, grants, etc.	2,005	1,806	2,361	2,235	3,708
Housing	1,883	1,899	2,758	2,705	1,935
Other public works	591	583	610	547	883
Primary production—					
Land settlement	2,532	2,688	2,308	1,927	2,250
Soldier settlement	64	13	2	..	2
Drought, etc., relief	208	208	915	4,131	1,488
Forestry	2,077	2,152	2,759	3,020	3,365
Mining, n.e.i.	218	145	230	254	254
Cool stores	180	184	235	80	66
Destruction of vermin and noxious weeds	1,864	2,065	2,084	2,143	2,261
Other primary production (a)	2,711	3,234	3,853	3,540	1,972
Other purposes	1,965	923	1,532	1,721	2,149
Total works, etc., expenditure	130,848	137,562	144,383	154,707	161,393
Funding of Consolidated Revenue deficits	..	4,000	4,000	..	2,887
Grand total	130,848	141,562	148,383	154,707	164,279

(a) Includes allocations to the Rural Finance and Settlement Commission to enable the Commission to assist industries (principally primary) in country areas.

Public debt

The public debt chiefly comprises moneys raised and expended with the object of assisting the development of the resources of the State and is, to a large extent, represented by tangible assets.

Loan moneys have been used in Victoria principally for the construction of railways, roads, water supply and sewerage works, schools, hospitals, and other public buildings, improvements to harbours and rivers, electricity supply, land settlement, and forestry.

A notable feature of the public debt of the State is that approximately 97 per cent of indebtedness is now domiciled in Australia. There has been a gradual change from the situation which existed a century ago when nearly all loans were financed in London. Even at the turn of the century, only 10 per cent of State indebtedness was domiciled in Australia.

In the tables in this section relating to the public debt of Victoria, loans domiciled in overseas countries have been converted to Australian currency at rates of exchange ruling at 30 June in each respective year.

Advances made by the Commonwealth Government to Victoria, under the Commonwealth-State agreements relating to housing, soldier settlement, and drought relief are not included in the public debt statements in this *Year Book*. The total of such advances owing at 30 June 1970 was \$533.5m, of which \$515.4m was for housing, \$13.0m for soldier settlement, and \$5.1m for drought relief. These liabilities should be taken into account when considering the total debt position of Victoria.

Public debt transactions

The following table shows particulars of the loans raised and redeemed during, and the amount outstanding at the end of, each of the years 1965-66 to 1969-70. The variations from year to year in the Australian currency equivalent of overseas loans, resulting from application of the rates of exchange ruling at 30 June in each year, are shown. Separate particulars are shown for loans raised in Australia and London, while loans raised in New York, Canada, Switzerland, and the Netherlands are grouped under one heading.

VICTORIA—STATE PUBLIC DEBT: SUMMARY OF TRANSACTIONS (\$A'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
DEBT MATURING IN AUSTRALIA					
Debt outstanding at 1 July	1,518,481	1,626,901	1,755,151	1,896,159	2,033,067
New debt incurred—					
Commonwealth Government loan flotations	313,629	300,736	317,543	277,113	367,951
Domestic raisings	2,228	1,444	3,771	1,581	..
Less conversion and redemption loans	191,394	163,111	161,646	131,604	206,934
Total new debt incurred	124,463	139,070	159,668	147,089	161,016
Less repurchases and redemptions from National Debt Sinking Fund	16,043	10,820	18,660	10,181	18,435
Net increase in debt	108,420	128,250	141,008	136,908	142,581
Debt outstanding at 30 June	1,626,901	1,755,151	1,896,159	2,033,067	2,175,649
DEBT MATURING IN LONDON					
Debt outstanding at 1 July	112,201	105,505	94,705	62,151	59,665
New debt incurred—					
Commonwealth Government loan flotations	3,876	2,500	16,408	..	1,496
Less conversion and redemption loans	..	..	..	..	..
Total new debt incurred	3,876	2,500	16,408	..	1,496
Less repurchases and redemptions from National Debt Sinking Fund	2,820	8,300	2,616	2,486	13,011
Adjustment due to variation in rate of exchange	..	..	-13,530	..	..
Net increase in debt	-6,696	-10,800	-32,554	-2,486	-14,507
Debt outstanding at 30 June	105,505	94,705	62,151	59,665	45,158
DEBT MATURING IN NEW YORK, CANADA, SWITZERLAND, AND THE NETHERLANDS					
Debt outstanding at 1 July	48,656	49,138	43,213	40,301	37,562
New debt incurred—					
Commonwealth Government loan flotations	3,461	3,285	..	..	1,343
Less conversion and redemption loans	..	..	..	..	..
Total new debt incurred	3,461	3,285	..	..	1,343
Less repurchases and redemptions from National Debt Sinking Fund	2,980	2,639	2,912	2,739	2,800
Adjustment due to variation in rate of exchange	..	..	..	..	+135
Net increase in debt	481	-5,924	-2,912	-2,739	-4,008
Debt outstanding at 30 June	49,138	43,213	40,301	37,562	(a) 33,554

VICTORIA—STATE PUBLIC DEBT: SUMMARY OF TRANSACTIONS— *continued*
(\$A'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
TOTAL					
Debt outstanding at 1 July	1,679,338	1,781,543	1,893,069	1,998,611	2,130,294
New debt incurred—					
Commonwealth Government loan flotations	317,089	300,736	317,543	277,113	367,951
Domestic raisings	2,228	1,444	3,771	1,581	..
Less conversion and redemption loans	195,271	168,896	178,054	131,604	209,773
Total new debt incurred	124,047	133,284	143,260	147,089	158,178
Less repurchases and redemptions from National Debt Sinking Fund	21,842	21,759	24,188	15,406	34,246
Adjustment due to variation in rate of exchange	..	..	-13,530	..	+135
Net increase in debt	102,205	111,525	105,542	131,683	124,067
Debt outstanding at 30 June	1,781,543	1,893,069	1,998,611	2,130,294	2,254,361

(a) Includes New York, \$A26,637,000; Canada, \$A2,672,000; Switzerland, \$A2,600,000; and the Netherlands, \$A1,647,000.

Particulars concerning the due dates of loans outstanding at 30 June 1970 are given in the following table. Where the Government has the option of redemption during a specified period, the loans have been classified according to the latest date of maturity.

VICTORIA—DUE DATES OF LOANS AT 30 JUNE 1970
(\$A'000)

Due date (financial year)	Amount maturing—				Total
	In Australia	In London	In New York	Elsewhere overseas	
1970-71	246,232	..	629	..	246,861
1971-72	175,975	..	2,431	..	178,407
1972-73	148,496	13,298	2,804	..	164,599
1973-74	127,742	..	..	..	127,742
1974-75	93,841	..	..	..	93,841
1975-76	118,061	600	..	(a) 2,600	121,261
1976-77	90,813	..	..	..	90,813
1977-78	98,220	5,216	..	..	103,436
1978-79	69,410	19,202	2,063	..	90,675
1979-80	51,291	..	2,439	..	53,730
1980-81	46,940	..	2,551	(b) 2,672	52,162
1981-82	55,939	6,199	4,153	(c) 1,647	67,938
1982-83	18,104	..	6,721	..	24,825
1983-84	88,725	643	..	..	89,368
1984-85	117,705	..	..	..	117,705
1985-86	72,179	..	2,846	..	75,025
1986-87	57,700	..	..	..	57,700
1987-88	98,790	..	..	..	98,790
1988-89	84,432	..	..	..	84,432
1989-90	107,890	..	..	..	107,890
1991-92	34,791	..	..	..	34,791
1994-95	8,985	..	..	..	8,985
1999-2000	6,911	..	..	..	6,911
2001-02	48,305	..	..	..	48,305
2003-04	84,314	..	..	..	84,314
2005-06	20,026	..	..	..	20,026
Not yet fixed	3,831	..	..	..	3,831
Total	2,175,649	45,158	26,637	6,918	2,254,361

(a) Maturing in Switzerland.

(b) Maturing in Canada.

(c) Maturing in the Netherlands.

The following table shows details of the amounts of loans outstanding in Australia, London, New York, Canada, Switzerland, and the Netherlands, and the amount of debt per head of population at the end of each of the years 1965-66 to 1969-70:

VICTORIA—PUBLIC DEBT : LOANS OUTSTANDING

At 30 June—	Amount of loans maturing in—						Total debt	
	Australia	London	New York	Canada	Switzerland	The Netherlands	Amount	Per head of population
	\$A'000	\$A'000	\$A'000	\$A'000	\$A'000	\$A'000	\$A'000	\$A
1966	1,626,901	105,505	41,407	3,072	2,600	2,059	1,781,543	553.24
1967	1,755,151	94,705	35,658	2,897	2,600	2,059	1,893,069	578.37
1968	1,896,159	62,151	33,060	2,721	2,600	1,921	1,998,611	601.69
1969	2,033,067	59,665	30,500	2,678	2,600	1,784	2,130,294	630.02
1970	2,175,649	45,158	26,637	2,672	2,600	1,647	2,254,361	655.34

The following table shows the rates of interest which were payable on the public debt at 30 June 1970, and the amounts of the debt at each rate maturing in Australia, London, New York, and elsewhere overseas, respectively:

VICTORIA—RATES OF INTEREST ON PUBLIC DEBT AT 30 JUNE 1970

Rate of interest	Amount maturing—				Total
	In Australia	In London	In New York	Elsewhere overseas	
per cent	\$A'000	\$A'000	\$A'000	\$A'000	\$A'000
7.0	21,943	..	..	..	21,943
6.8	10,466	..	..	..	10,466
6.5	58,287	..	..	..	58,287
6.4	6,751	..	..	..	6,751
6.0	54,817	1,243	..	..	56,060
5.9	13,353	..	..	..	13,353
5.8	30,041	..	..	..	30,041
5.75	20,594	..	2,846	(a) 2,672	26,111
5.6	39,321	..	..	..	39,321
5.5	20,327	43,915	10,874	..	75,116
5.4	165,743	..	..	..	165,743
5.375	67,305	..	..	..	67,305
5.3	10,186	..	..	..	10,186
5.25	474,687	..	4,990	..	479,677
5.2	39,411	..	..	..	39,411
5.0	666,882	..	4,494	(b) 1,647	673,022
4.9	40,316	..	..	..	40,316
4.8	87,934	..	..	..	87,934
4.75	115,720	..	2,804	..	118,524
4.625	14,150	..	..	..	14,150
4.6	9,568	..	..	..	9,568
4.5	118,577	..	629	(c) 2,600	121,805
4.25	81,251	..	..	..	81,251
3.875	106	..	..	..	106
3.4875	1	..	..	..	1
3.1	553	..	..	..	553
3.0	1,844	..	..	..	1,844
2.7125	222	..	..	..	222
2.325	1,105	..	..	..	1,105
1.0	4,189	..	..	..	4,189
Total	2,175,649	45,158	26,637	6,918	2,254,361
Average rate of interest	% 5.15	% 5.51	% 5.29	% 5.08	% 5.15

(a) Maturing in Canada. (b) Maturing in the Netherlands. (c) Maturing in Switzerland.

In the next table the annual interest liability of the State has been calculated on the basis of the debt outstanding at the end of each of the years 1965-66 to 1969-70. The liability, therefore, represents the amount of interest payable in the ensuing year without regard to new loan raisings and redemptions during that year.

The table shows particulars of the annual interest payable in Australia and in overseas countries, respectively, the total liability per head of population, and the average rate of interest liability.

VICTORIA—ANNUAL INTEREST LIABILITY

At 30 June—	Payable in Australia	Payable in overseas countries	Total	Per head of population	Average rate
	\$A'000	\$A'000	\$A'000	\$A	per cent
1966	77,879	7,144	85,023	26.40	4.77
1967	85,417	6,516	91,933	28.09	4.86
1968	92,892	5,180	98,072	29.52	4.91
1969	100,963	4,948	105,911	31.32	4.97
1970	111,941	4,253	116,193	33.78	5.15

The actual interest and expenses paid on the public debt of Victoria for each of the years 1965-66 to 1969-70 are shown in the following table :

VICTORIA—INTEREST AND EXPENSES OF PUBLIC DEBT (\$A'000)

Year	Interest paid on loans maturing—				Total interest	Exchange on pay- ment of interest overseas	Commis- sion on payment of interest overseas, expenses of conversion loans, etc.	Grand total (a)
	In Australia	In London	In New York	Elsewhere overseas				
1965-66	72,058	3,877	1,007	209	77,150	2,344	353	79,847
1966-67	78,450	3,566	984	205	83,204	2,238	376	85,818
1967-68	86,369	3,165	879	199	90,611	1,579	376	92,567
1968-69 (b)	94,295	3,082	1,743	373	99,493	(b)	400	99,893
1969-70 (b)	104,852	2,808	1,585	(c) 370	109,615	(b)	400	110,015

(a) Includes \$A4,254,000 contributed each year by the Commonwealth Government in accordance with the provisions of the Financial Agreement (see pages 611-2), but excludes interest paid on advances received from the Commonwealth Government for housing and soldier settlement.

(b) For each of the years 1968-69 and 1969-70 exchange on payments of interest overseas has been included with interest paid in overseas countries.

(c) Includes Canada, \$A163,000; Switzerland, \$A118,000; and the Netherlands, \$A88,000.

National Debt Sinking Fund

Under the Financial Agreement of 1927 between the Commonwealth and the States, it was arranged that the Commonwealth assume responsibility for the public debt of the States. The securities covering these debts would be redeemed or repurchased by payments from the National Debt Sinking Fund (which had been in existence from 1923) and the Commonwealth and the States were to make annual contributions to the Fund for this purpose.

Details of transactions of the National Debt Sinking Fund in respect of the Public Debt of the State of Victoria, for each of the years 1965-66 to 1969-70, are shown in the following tables. The first table shows particulars of the receipts of the Fund, and the second table shows details

of the expenditure on, and face value of, securities repurchased and redeemed.

VICTORIA—NATIONAL DEBT SINKING FUND : RECEIPTS
(£'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Contributed under Financial Agreement—					
Victoria	16,437	17,522	18,613	20,031	20,910
Commonwealth	4,225	4,524	4,885	5,189	5,600
Total contributions under Financial Agreement	20,662	22,046	23,498	25,220	26,510
Interest on investments	5	Dr. 10	5	30	28
Special contributions by Victoria	102	102	25	25	25
Interest accrued on securities	..	..	..	Dr. 109	229
Total	20,769	22,138	23,528	25,167	26,793
Total to date	250,064	272,202	295,730	320,897	347,689

**VICTORIA—NATIONAL DEBT SINKING FUND : SECURITIES
REPURCHASED AND REDEEMED**
(£A'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Australia—					
Face value	16,043	10,820	18,660	10,181	18,435
Net cost	16,027	10,807	18,652	10,180	18,414
London—					
Face value	2,820	8,300	2,616	2,486	14,507
Net cost	2,667	8,302	2,783	2,357	12,723
New York—					
Face value	2,783	2,464	2,598	2,560	2,521
Net cost	2,765	2,408	2,410	2,323	2,205
Canada—					
Face value	197	175	177	42	142
Net cost	197	172	160	37	109
Netherlands—					
Face value	..	..	137	137	137
Net cost	..	..	138	139	139
Total—					
Face value	21,842	21,759	24,188	15,406	35,742
Net cost	21,656	21,689	24,142	15,036	33,591
Total to date—					
Net cost	249,853	271,542	295,684	310,720	344,311

Further reference, 1964

PRIVATE FINANCE

Commonwealth banking legislation

Information about the provisions of Commonwealth banking legislation will be found on pages 648-50 of the *Victorian Year Book* 1966.

Banking during 1970

As a part of the official monetary policy designed to contain inflationary pressures in the economy during 1970, several increases were made in bank interest rates during the year. In March 1970 the major trading banks'

maximum term deposit rate was increased by 0.5 per cent (including Certificates of Deposit) and the maximum overdraft rate also increased by 0.5 per cent. The interest rate structure of savings banks was altered in the early part of the year. In April rates on ordinary deposit accounts and investment accounts were increased, and differential interest rates were applied to ordinary accounts above and below \$4,000 (up to a maximum of \$20,000 which, in turn, was increased from \$10,000—the previous maximum level on which the maximum rate was paid). The range of interest rates charged on housing loans was raised concurrently by 0.75 per cent per annum.

Towards the end of September 1970 further transfers were made to the term loan funds and farm development funds of the major trading banks. The transfers aggregated about \$63m, of which \$31m was added to term loan funds and \$32m to farm development funds, bringing the resources of these funds to \$358m and \$119m, respectively. In association with the transfers, the Statutory Reserve Deposit ratio was reduced from 10 per cent to 9.4 per cent of deposits.

When it became apparent that the level of home building activity had receded in mid-1970, savings banks were requested to increase the flow of finance to the industry in July. As a sequel, an important amendment to the Banking (Savings Banks) Regulations was announced at the end of October, reducing the proportion of depositors' balances required to be held by savings banks in prescribed liquid assets and public securities from 65 per cent to 60 per cent. This change allowed savings banks to increase their lending, mainly for housing. Savings bank loans for housing increased from an average monthly rate of \$38.6m during the June quarter 1970 to \$48.4m and \$48.5m in the September and December quarters, respectively.

A further significant change in the banking system's ability to gather deposits was the announcement in December that the Reserve Bank had approved the extension to four years of fixed deposit facilities offered by trading banks; previously the maximum term for fixed deposits had been two years. At the same time, the maximum interest rate payable by trading banks on term deposits was increased to 6.5 per cent per annum. These changes were designed to increase the competitiveness of trading bank deposit facilities. No change was made in interest rates on Certificates of Deposit at this time.

Interest rates on term deposits with trading banks at the end of 1970 were as follows :

Rate per cent	Term	
5.0	3 months to less than 18 months	} On amounts under \$50,000
5.3	18 months up to, and including, 24 months	
5.6	over 24 months to less than 3 years	
6.0	3 years to less than 4 years	
6.5	4 years	
5.5	30 days up to, and including, 24 months	} On amounts of \$50,000 and over
6.0	over 24 months to less than 4 years	
6.5	4 years and over	

Deposits

Deposits of the major trading banks rose by only \$187m in 1970 (to a total of \$6,945m), compared with increases of \$393m and \$648m in 1968 and 1969, respectively. The smaller growth in deposits during 1970 was mainly explained by the Commonwealth Government's budgetary deficit during the second half of 1970 which was financed largely by the public taking up short-term government debt (due to the relative attractiveness of interest rates on Treasury notes), in contrast to 1969 when the deficit was largely financed by the Reserve Bank. This feature of debt management was also a major factor leading to the sharp contraction in trading bank liquidity during the year.

A particularly striking feature of the year was that Certificates of Deposit, after rising to a peak of \$246.7m in January 1970, declined to only \$77.9m by the end of the year, due largely to the interest rate ceiling which seemed uncompetitive, especially when compared with Treasury notes.

Growth in savings bank deposits was also less than 1969. Deposits increased by \$420m in 1970 to a total of \$7,363m, compared with increases of \$487m and \$435m in 1969 and 1968, respectively.

Deposits of the major trading banks in Victoria declined from 29.3 per cent of the Australian total in 1969 to 28.3 per cent in 1970. Victorian savings bank deposits, on the other hand, rose from 33.5 per cent of the Australian total in 1969 to 33.7 per cent in 1970.

Advances

Major trading banks' advances in 1970 increased by \$253m to a total of \$4,392m. This was a 6.1 per cent increase, compared with 11.3 per cent in 1969 and 12.4 per cent in 1968. The growth in bank lending was checked by the liquidity constraints referred to earlier.

In July the major trading banks entered into an agreement with the Australian Wool Marketing Corporation to provide up to \$35m to wool brokers for the purchase of "price averaging" wool (i.e., one to three bale lots) and up to \$14m to the Corporation itself as carry-over finance to enable it to purchase unsold wool at the end of the wool season. The functions of the Corporation were subsequently taken over by the Australian Wool Commission, to which the trading banks subsequently undertook to provide funds up to a total of \$80.5m.

Lending by the Australian Resources Development Bank continued at a high level throughout 1970, with loans rising by \$103.6m to a total of \$225m outstanding at 31 December. During the year, the Resources Bank made greater use of overseas capital markets for fund raising purposes, and borrowed significant amounts overseas for on-lending for Australian resources development.

Liquidity

An indication of the manner in which official policy operated through the banking system to restrain lending and help prevent over-expansion in the economy, is provided by the statistics of major trading banks' liquid items (cash and government securities) expressed as a percentage of deposits.

In each month of 1970 the L.G.S. ratio of the major trading banks was below that of a year earlier. For several months of the year the ratio was only a few percentage points above the agreed minimum ratio of 18 per cent

and consequently the banks' ability to meet the public's demand for finance was severely restricted.

AUSTRALIA—MAJOR TRADING BANKS'
L.G.S. RATIO (a)
(per cent)

Month	1969	1970
January	26.8	24.6
February	28.3	25.4
March	28.0	25.3
April	25.7	23.1
May	24.0	21.8
June	22.9	20.5
July	21.9	20.0
August	22.5	20.4
September	23.0	20.9
October	23.1	21.2
November	23.3	22.1
December	23.4	22.6
Average for year	24.4	22.3

(a) The L.G.S. ratio is the ratio of L.G.S. assets (liquid and government securities) to deposits.

Further references, 1962–1971; History of banking in Victoria, 1961

Reserve Bank of Australia

The Reserve Bank is Australia's central bank and acts as banker and financial agent of the Commonwealth. The *Reserve Bank Act* 1959–1966 preserved and continued in existence the original body corporate known as the Commonwealth Bank of Australia under the new name, Reserve Bank of Australia, and also preserved within it the special departments of Note Issue and Rural Credits.

Financial statements

The Bank's liabilities and assets, for each of the years 1965–66 to 1969–70, together with net profits and their distribution are shown in the following tables :

AUSTRALIA—RESERVE BANK : RURAL CREDITS
DEPARTMENT : AVERAGE LIABILITIES AND ASSETS
(\$m)

Particulars	1965–66	1966–67	1967–68	1968–69	1969–70
Liabilities (excluding capital and contingencies)	167.7	215.7	250.4	284.7	401.9
Assets—					
Loans, advances, etc.	195.8	245.7	283.0	319.8	440.6
Other assets	0.2	0.1	(a)	0.1	..
Total assets	196.0	245.8	283.1	319.9	440.6

(a) Under \$50,000.

**AUSTRALIA—RESERVE BANK :
CENTRAL BANKING BUSINESS (INCLUDING NOTE ISSUE
DEPARTMENT) : AVERAGE LIABILITIES AND ASSETS
(\$m)**

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Liabilities—					
Capital and reserve funds	70	74	72	61	100
Australian notes on issue	872	909	990	1,071	1,176
Statutory Reserve Deposit—					
Accounts of trading banks	608	476	480	523	647
Other deposits of trading banks	67	93	73	83	45
Deposits of savings banks	437	456	505	568	596
Other liabilities	274	278	227	225	285
Total	2,328	2,286	2,348	2,531	2,849
Assets—					
Gold and foreign exchange	1,208	1,174	1,042	1,090	1,043
Australian notes and coin	22	24	18	14	10
Cheques and bills of other banks	8	6	5	5	5
Australian Government securities—					
Redeemable in Australia—					
Treasury bills and Treasury notes	295	314	187	300	433
Other	539	440	728	713	817
Bills receivable and remittances in transit	24	29	31	35	35
Loans, advances, and all other assets	232	300	336	374	506
Total	2,328	2,286	2,348	2,531	2,849

**AUSTRALIA—RESERVE BANK : NET PROFITS
(\$m)**

Department	1965-66	1966-67	1967-68	1968-69	1969-70
Central banking	8.7	7.9	4.5	5.7	8.9
Note issue	31.1	34.3	23.0	23.8	36.3
Rural credits	1.2	1.3	1.5	1.6	1.9
Total	41.0	43.6	29.0	31.1	47.1

**AUSTRALIA—RESERVE BANK : DISTRIBUTION OF PROFITS
(\$m)**

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Commonwealth of Australia	35.8	38.8	26.2	26.6	41.6
Reserve Bank reserve fund	4.0	3.5	1.3	2.9	3.6
Rural Credits Department—					
Reserve fund	0.6	0.7	0.7	0.8	0.9
Development fund	0.6	0.7	0.7	0.8	0.9
Total	41.0	43.6	29.0	31.1	47.1

Further reference, 1966

Trading banks

The following table shows the number of branches and agencies in Victoria conducted by individual trading banks at 30 June 1969 and 1970 :

**VICTORIA—TRADING BANKS : NUMBER
OF BRANCHES AND AGENCIES**

Bank	At 30 June 1969		At 30 June 1970	
	Branches	Agencies	Branches	Agencies
Major trading banks—				
Commonwealth Trading Bank of Australia	136	88	139	85
Australia and New Zealand Bank Ltd	216	94	222	89
The Bank of Adelaide	2	..	2	..
Bank of New South Wales	172	13	175	12
The Commercial Bank of Australia Ltd	168	61	168	60
The Commercial Banking Co. of Sydney Ltd	139	39	143	40
The English, Scottish, and Australian Bank Ltd	158	30	161	28
The National Bank of Australasia Ltd	240	78	243	79
Total major trading banks	1,231	403	1,253	393
Other trading banks—				
Bank of New Zealand	1	..	1	..
Banque Nationale de Paris	1	..	1	..
Total other trading banks	2	..	2	..
Total all trading banks	1,233	403	1,255	393
Metropolitan area	705	195	727	188
Remainder of State	528	208	528	205

The following tables show particulars of the averages of deposits with, and advances by, trading banks in Victoria during the month of June 1970. Comparable figures for the month of June for each of the preceding four years are also shown in the second table. The monthly averages are obtained by recording the amounts of deposits and advances at the close of business on Wednesday of each week.

**VICTORIA—MAJOR TRADING BANKS : AVERAGES OF DEPOSITS
AND ADVANCES, MONTH OF JUNE 1970
(\$'000)**

Bank	Deposits repayable in Australia			Loans (a), advances, and bills discounted
	Not bearing interest	Bearing interest	Total	
Commonwealth Trading Bank of Australia	120,954	161,172	282,126	203,991
Private trading banks—				
Australia and New Zealand Bank Ltd	203,275	190,513	393,787	225,736
The Bank of Adelaide	3,603	2,187	5,790	3,254
Bank of New South Wales	124,271	116,584	240,854	166,994
The Commercial Bank of Australia Ltd	121,822	118,079	239,900	167,298
The Commercial Banking Co. of Sydney Ltd	66,979	84,198	151,176	84,999
The English, Scottish, and Australian Bank Ltd	128,020	104,187	232,206	149,771
The National Bank of Australasia Ltd	177,546	213,227	390,773	204,856
Total	946,468	990,144	1,936,611	1,206,903

(a) Excludes loans to authorised dealers in the short-term money market.

**VICTORIA—MAJOR TRADING BANKS : AVERAGES
OF DEPOSITS AND ADVANCES
(\$'000)**

Month of June—	Deposits repayable in Australia			Loans (a), advances, and bills discounted
	Not bearing interest	Bearing interest	Total	
1966	793,819	742,308	1,536,129	798,639
1967	839,150	789,346	1,628,495	900,943
1968	891,749	850,568	1,742,317	1,026,653
1969	906,590	978,101	1,884,690	1,103,548
1970	946,468	990,144	1,936,611	1,206,903

(a) Excludes loans to authorised dealers in the short-term money market.

A classification of persons and authorities in receipt of trading bank advances is given in the following table. Business advances are classified according to the main industry of the borrower.

**VICTORIA—MAJOR TRADING BANKS : CLASSIFICATION OF ADVANCES
(\$m)**

Classification	At second Wednesday of July—				
	1966	1967	1968	1969	1970
Resident borrowers—					
Business advances—					
Agriculture, grazing, and dairying	119.2	150.7	193.1	207.6	209.1
Manufacturing	212.6	225.7	240.4	226.0	258.1
Transport, storage, and communication	16.6	19.3	19.1	23.4	22.8
Finance	49.4	46.3	65.1	58.5	77.3
Commerce	151.9	164.9	168.1	193.2	194.8
Building and construction	25.5	32.2	38.0	41.4	44.2
Other businesses	75.5	88.2	114.1	133.5	152.0
Unclassified	7.3	12.6	9.7	17.7	12.6
Total business advances	658.1	739.9	847.6	901.3	971.0
Advances to public authorities	14.9	12.0	15.3	17.7	23.7
Personal advances	119.4	140.3	165.6	184.4	199.3
Advances to non-profit organisations	12.9	14.2	16.9	17.4	19.6
Total advances to resident borrowers	805.4	906.4	1,045.4	1,120.8	1,213.6
Non-resident borrowers	0.3	0.5	1.2	1.2	1.2
Grand total	805.7	906.9	1,046.6	1,121.9	1,214.7

The above classification for bank deposits is available only on a Commonwealth basis, and is to be found in the *Banking and Currency* bulletin issued annually by the Commonwealth Statistician.

The following table shows the average weekly amounts debited by trading banks to customers' accounts. Particulars relate to the operation of all trading banks transacting business in Victoria (as set out in the first table on page 651) and, in addition, the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank. Debits to Commonwealth and State Government accounts at Melbourne city branches are excluded from the table.

**VICTORIA—TRADING BANKS (a) : AVERAGE
WEEKLY DEBITS TO CUSTOMERS' ACCOUNTS
(\$m)**

Year	Average weekly debits	Year	Average weekly debits
1960-61	565.9	1965-66	847.7
1961-62	590.0	1966-67	940.0
1962-63	650.5	1967-68	1,041.8
1963-64	733.2	1968-69	1,214.1
1964-65	825.3	1969-70	1,413.3

(a) Also includes the Rural Credits Department of the Reserve Bank and the Commonwealth Development Bank.

Commonwealth Banking Corporation

The Commonwealth Banking Corporation, established under the *Commonwealth Banks Act 1959*, came into being on 14 January 1960, and is the controlling body for the Commonwealth Trading Bank of Australia, the Commonwealth Savings Bank of Australia, and the Commonwealth Development Bank of Australia.

The Corporation Board consists of three *ex officio* members, namely, the Managing Director and Deputy Managing Director of the Corporation and the Secretary to the Treasury, plus eight members (who include the Chairman and Deputy Chairman) appointed from private enterprise other than the private banking industry.

It is the duty of the Board, within the limits of its powers, to ensure that the policy of the Corporation and the banking policy of the Trading Bank, of the Savings Bank, and of the Development Bank are directed to the advantage of the people of Australia and have due regard to the stability and balanced development of the Australian economy.

Commonwealth Trading Bank of Australia

The Commonwealth Trading Bank is one of the three member banks comprising the Commonwealth Banking Corporation and has a history of over fifty years of banking experience. It accepts interest bearing deposits, issues Certificates of Deposit, and provides cheque account facilities, a wide range of loans, lease financing, nominee facilities, and the usual trading bank services including the acceptance of safe custody lodgments.

The Commonwealth Trading Bank is now one of the largest trading banks. At June 1970 advances to customers were \$832m; customers' accounts were \$1,378m or over 20.8 per cent of the total deposits of all major Australian trading banks; customers' accounts numbered 1,096,000; and it had 1,126 branches and agencies throughout Australia.

On the international scene, the Bank has agents and correspondents throughout the world, enabling it to handle all types of international monetary transactions. It has always helped the promotion of Australia's international trade and finances a large volume of export and import business. Its officers have been members of Commonwealth Government trade missions and its Trade Service is able to provide up-to-date information on economic conditions and market prospects in overseas countries.

AUSTRALIA—COMMONWEALTH TRADING BANK: DEPOSITS, ADVANCES, AND NUMBER OF ACCOUNTS

At 30 June—	Deposits repayable in Australia (Average for month of June)			Advances	Number of accounts
	Bearing interest	Not bearing interest	Total		
	\$m	\$m	\$m	\$m	'000
1966	469	454	923	493	938
1967	517	497	1,014	561	972
1968	580	542	1,122	667	1,008
1969	683	597	1,280	718	1,054
1970	751	627	1,378	832	1,096

Facilities for the conduct of share, stock, note, and debenture registers for public companies and local and semi-governmental authorities are provided by the Bank's Stock and Share Department.

Commonwealth Savings Bank of Australia

The Commonwealth Savings Bank of Australia was established in July 1912. It is the largest savings bank in Australia, having total assets at June 1970 of \$3,096m.

At the end of June 1970 amounts on deposit with the Savings Bank within Australia totalled \$2,959m and it was conducting 7,236,000 active accounts. The Savings Bank's depositors' balances are widely invested in the development of Australia; apart from advances (mainly for housing) of \$991m outstanding in June 1970, investments in Commonwealth and State Government securities totalled \$1,224m and in local and semi-governmental securities amounted to \$458m.

Between 1960 and June 1970 over \$1,126m has been provided for housing, assistance having been provided to more than 180,000 families.

The Commonwealth Savings Bank and the Commonwealth Trading Bank provide special services to facilitate the assimilation of newcomers to Australia through the Australian Financial and Migrant Information Service in London, the Migrant Information Service in all capital cities and other major centres, and agencies conducted on migrant vessels and at hostels.

AUSTRALIA—COMMONWEALTH SAVINGS BANK :
NUMBER OF ACTIVE ACCOUNTS, AMOUNT AT
CREDIT OF DEPOSITORS, LOANS AND ADVANCES
OUTSTANDING, ETC.

At 30 June—	Number of active accounts	Amount at credit of depositors	Loans and advances outstanding	Common- wealth and other securities held
	'000	\$m	\$m	\$m
1966	6,346	2,318	640	1,475
1967	6,582	2,493	742	1,515
1968	6,822	2,645	838	1,577
1969	7,038	2,817	927	1,648
1970	7,236	2,959	991	1,682

Commonwealth Development Bank of Australia

The Commonwealth Development Bank of Australia commenced operations on 14 January 1960, taking over the assets and liabilities of the Industrial Finance and Mortgage Bank Departments of the former Commonwealth Bank of Australia.

The Development Bank is a source of development finance supplementary to the trading banks and other recognised sources of finance. It provides assistance for primary production and for the establishment or development of industrial undertakings, particularly small undertakings, where the funds sought are not otherwise available on reasonable and suitable terms and conditions, and, in the opinion of the Bank, the provision of finance is desirable.

Rural loans are made for a variety of purposes, e.g., clearing, fencing, pasture improvement, farm water conservation, erection of essential farm buildings, and the basic stocking of properties. Other aspects of assistance granted include aid to successful applicants in government sponsored rural development schemes and land ballots. Special attention is also given to providing finance to applicants opening up new areas.

Details of financial assistance approved by the Commonwealth Development Bank during the period 14 January 1960 to 19 May 1971 are set out in the following tables :

**AUSTRALIA AND VICTORIA—COMMONWEALTH DEVELOPMENT BANK :
LOANS APPROVED, 14 JANUARY 1960 TO 19 MAY 1971**

Particulars	Rural loans		Industrial loans		Total	
	Number	Amount	Number	Amount	Number	Amount
		\$'000		\$'000		\$'000
Australia	25,649	301,971	2,849	94,417	28,498	396,388
Victoria	4,398	47,219	654	23,319	5,052	70,538

**AUSTRALIA AND VICTORIA—COMMONWEALTH
DEVELOPMENT BANK : EQUIPMENT FINANCE
UNDER HIRE PURCHASE ARRANGEMENTS,
14 JANUARY 1960 TO 19 MAY 1971**

Particulars	Number of transactions	Amount financed
		\$'000
Australia	143,916	439,294
Victoria	28,840	97,609

Outstanding loans by the Commonwealth Development Bank to rural and other industries in Australia at 30 June 1970 were as follows :

**AUSTRALIA—COMMONWEALTH DEVELOPMENT BANK : LOANS TO
RURAL AND OTHER INDUSTRIES OUTSTANDING AT 30 JUNE 1970
(\$'000)**

Rural industries		Non-rural industries	
Type of industry	Loans outstanding	Type of industry	Loans outstanding
Sheep	83,025	Building materials and fittings	2,236
Cattle	29,246	Chemical products	1,133
Dairying	17,593	Electrical manufacturing	509
Wheat and other grain crops	27,734	Foodstuffs and preservation	7,453
Fruit	5,121	Engineering	4,524
Poultry	3,118	Other manufacturing	7,359
Miscellaneous	10,122	Transport, storage, and communication	1,902
		Miscellaneous	7,009
Total	175,959	Total	32,125

Further references, 1964 and 1967 ; Australian Resources Development Bank Ltd, 1970

State Savings Bank of Victoria

The State Savings Bank of Victoria, which was established in 1841, is constituted under Victorian statutes and operates branches and agencies throughout Victoria. It is directed by a government appointed board of seven commissioners, who exercise control through the general manager. The business of the bank is conducted in two departments, the Savings Bank Department and the Credit Foncier Department.

The Savings Bank Department accepts interest-bearing deposits through pass-book, school bank, Christmas Club accounts, and fixed deposit stock and term deposits, and provides cheque account, safe deposit, and a wide range of other banking services. The funds are principally invested in loans to semi-governmental, municipal, and other public authorities within Victoria; loans on the security of first mortgage over freehold land for houses and farms either directly or through investment in the debentures of the Credit Foncier Department; and in Commonwealth Government securities.

The Credit Foncier Department, which is wholly financed by the Savings Bank Department, makes long-term loans to finance the erection and purchase of homes and farms.

The State Savings Bank of Victoria is the largest savings bank in Victoria, having assets of \$1,261m at 30 June 1970. The deposits of its 2.8m operative accounts, held at 507 branches and sub-branches and 668 agencies, amounted to \$1,164m which represented approximately 49 per cent of all savings bank balances in Victoria.

Changes in savings banking

In matters of accounting procedures, range of services, and architectural style of premises, the State Savings Bank of Victoria has made major changes in the past fourteen years. Some of these changes have been evolutionary, but others have been dictated by external circumstances.

Competition among banks for savings was greatly accentuated by the Commonwealth Government's decision in 1956 to grant licences to savings bank subsidiaries of private trading banks. In consequence there are now eight savings banks actively competing in Victoria whereas the State Savings Bank had only one competitor before 1956.

Under a 1957 amendment to the State Savings Bank Act, the bank was empowered to conduct cheque accounts which, except in the case of certain non-profit organisations, do not bear interest. At 30 June 1970 the bank held 215,902 cheque accounts with balances of \$57.5m.

The growth of permanent building societies accelerated in 1965 when the Commonwealth Government established the Housing Loans Insurance Corporation which insures housing loans made by approved lenders. This again increased competition for savings.

The traditional pattern of savings has also been altered by a marked increase in social services which have lessened the trend towards self-provision for illness and old age, by a general increase in living standards, and by the continued development of a consumer goods market.

Among the steps taken to adapt to this changed environment have been radical changes in accounting procedures. The bank pioneered in Australia the use of punched cards and centralised accounting in connection

with savings bank transactions. The installation of a computer in 1962, the first computer in any Australian bank, made it possible to centralise the transactions of large branches at the data processing centre at the bank's head office. At 30 June 1970, 194 branches and sub-branches were operating with tellers' machines, and the pass-book accounts for thirty-three offices were maintained by the computer which also processed many head office transactions. The computer made it possible for the bank to introduce a "Christmas Club" in November 1964. This is a form of saving for a specific purpose, by a method not previously available in Australia, by means of a book of coupons rather than by the conventional pass-book. Members choose from books of 25 or 50 coupons in denominations of \$1 to \$10, pre-punched with account and serial numbers for computer processing. The "Christmas Club" has been well received and the idea has spread. For the year ending 30 November 1970, \$15m was paid out to members.

Introduction of secured and unsecured personal loans in November 1963 was a departure from historical savings bank practice which had previously provided for loans to individuals on the security of a mortgage over freehold land only. The initial ceiling limit of \$720 for secured loans has been lifted to \$3,000 and the maximum term is five years. The bank, in special cases, grants larger loans. A wide range of securities is acceptable and the purposes include the purchase of land or property, the carrying on of farms and small businesses, the purchase of all types of motor vehicles, improvements to property, medical, education, and travelling expenses, and rates and taxes. Unsecured loans for a restricted range of purposes are also available up to a maximum of \$720 (including interest) for terms up to three years. At 30 June 1970, 12,329 borrowers owed \$11,847,561.

To meet other changing circumstances the State Savings Bank Act was amended in 1969 to give the bank power to lend on residence area rights and residence licences under the Land Act; flexibility in the terms on which it can accept deposits; and greater administrative flexibility in dealing with loans. The first amendment corrected an anomaly in the existing legislation which precluded the bank from lending on area titles, and made provision for the bank to make loans on the security of liens over residence area rights and residence licences under the Land Act. This applies mainly to old mining areas. The second amendment allows the bank to accept term deposits at variable rates of interest, and to issue negotiable Certificates of Deposits in respect of term deposits of \$50,000 and upwards by multiples of \$10,000. It also permits the bank to hold funds with banks anywhere, thereby simplifying the procedures for arranging settlements for overseas remittances on behalf of depositors. The third section deals with the limit on the bank's powers to make unsecured personal loans. It removes the restrictions imposed by the present Act, so the conditions may now be varied by the Governor in Council on the recommendation of the commissioners.

To provide banking facilities for a rapidly expanding population, and to replace agencies formerly conducted by private banks, the State Savings Bank increased the number of its branches and sub-branches from 267 in 1956 to 507 in 1970. In the same period many of the bank's older

branches were re-built or modernised to provide attractive premises for clients and staff.

In the face of increased competition, the State Savings Bank has greatly expanded the volume of its advertising and other forms of publicity, in the press, and on radio and television. Advertising has been extended to the foreign language press for migrant depositors; and to establish a personal contact with new settlers, the bank recruits staff with linguistic ability. In 1970 the bank's staff included over 200 officers who collectively spoke over twenty foreign languages. The bank also sends promotion officers into places of employment and schools.

Depositors' balances have increased from \$528.6m at 30 June 1956, the year in which private banks entered the savings field, to \$1,163.6m at 30 June 1970.

Housing and farm loans

The State Savings Bank has been the largest single source of housing finance in Victoria since it introduced low cost long-term mortgage loans. These were first offered in 1894 to farmers and pastoralists to rescue them from the difficulties caused by the financial excesses of the 1880s and were extended to city home buyers in 1910. Since then, the bank has helped about 220,000 Victorian families to purchase their own homes. At 30 June 1970, 72,116 housing loan borrowers owed a total debt of \$395.6m.

In less direct ways, the bank provides further assistance to home seekers. Overdraft accommodation has been provided to co-operative housing societies and, at 30 June 1970, \$12.3m was owed to the bank by 106 societies. The bank also provides funds to the Home Finance Trust which, at 30 June 1970, owed the bank \$9.7m.

Rural interests are well served by long-term mortgage loans or short-term personal loans. Advances to farmers totalled \$3.5m in 1969-70 and at 30 June 1970, \$20.6m was outstanding from 1,768 borrowers.

Loans for housing services

Houses require such services as water, power, and sewerage, while such amenities as made roads, nearby baby health centres, and recreation areas are also important adjuncts to family living. The bank lends considerable support to the semi-governmental and municipal authorities responsible for providing these services; the amount invested with them at 30 June 1970 was \$388.9m.

Loans to churches, schools, social organisations, etc.

The bank has always been a source of finance for the erection of churches, school buildings, and community halls and for the provision of associated amenities. The advances to borrowers during 1969-70 totalled \$0.9m.

Industrial savings facilities

The original form of banking-at-work introduced to Australia in 1927 by the State Savings Bank of Victoria enables employees to lodge deposits in strong-boxes situated conveniently at their place of work. Three allied

forms of saving are National Savings Groups, Pay Roll Savings Plans, and Employees Savings Groups, all of which provide an easy and convenient method of saving.

School banking

The State Savings Bank's school bank system was introduced in 1912. At 30 June 1970 banking was provided at 2,538 schools for 456,724 depositors where balances totalled \$8.3m. An additional service for secondary schools is the student-operated bank, staffed, as the name implies, by the students themselves.

Facilities for travellers

Travellers' cheques are obtainable at any branch and can be cashed at any bank in Australia free of charge. They are available also for overseas use. Depositors travelling in Victoria may arrange withdrawals on a pass-book account at any of the bank's branches. Withdrawals interstate can be made at any branch of any bank, subject to prior arrangement with the depositor's own branch. Visitors to and migrants from the United Kingdom may use pass-book accounts at the bank's London office. Remittances to most countries in the world can be arranged at any branch of the Bank.

Miscellaneous facilities

Depositors may arrange for payments from government departments (child endowment, military pay, and other allotments), dividends on shares, interest on stocks and debentures, in some cases salaries, and other special credits to be made direct to their accounts. Full facilities are provided at all branches for the acceptance of cash and conversion applications for government, semi-government, and public authority loans. The State Savings Bank accepts amounts due to the State Electricity Commission and several other Victorian public utilities.

The following table shows the number of accounts open and the amount remaining on deposit for each year from 1966 to 1970 :

VICTORIA—STATE SAVINGS BANK: ACCOUNTS AND DEPOSITS (a)

At 30 June—	Pass-book and cheque accounts		Deposit stock accounts		School bank accounts	
	Number of operative accounts	Amount at credit of depositors	Number of operative accounts	Amount at credit of stockholders	Number of operative accounts	Amount at credit of depositors
	'000	\$'000	'000	\$'000	'000	\$'000
1966	1,860	772,914	31	109,736	422	8,046
1967	1,912	820,102	37	133,187	438	8,471
1968	1,962	863,568	41	155,781	451	8,759
1969	2,012	911,658	54	176,429	464	9,124
1970	2,087	964,161	61	182,817	457	8,257

(a) Excluding Christmas Club accounts. At 30 June 1970 the amount at credit of 183,583 Christmas Club members was \$8,361,248.

The following table shows the transactions of the bank for each year from 1965-66 to 1969-70 :

VICTORIA—STATE SAVINGS BANK TRANSACTIONS
(\$'000)

Year	Deposits	Withdrawals	Interest paid	Amount at credit of depositors
1965-66	1,357,131	1,327,491	24,387	893,602
1966-67	1,390,326	1,343,254	25,633	966,307
1967-68	1,568,130	1,533,657	27,408	1,033,823
1968-69	1,800,632	1,767,385	30,479	1,104,253
1969-70	2,043,393	2,016,591	32,541	1,163,596

The following table shows the amounts advanced by the State Savings Bank during each of the years 1965-66 to 1969-70 and the balances outstanding at the end of each year :

VICTORIA—STATE SAVINGS BANK : ADVANCES AND BALANCES
OUTSTANDING FOR MORTGAGE AND OTHER LOANS (a),
SAVINGS BANK AND CREDIT FONCIER DEPARTMENTS
(\$m)

Year	Advances					Balances outstanding at end of year	
	Savings bank			Credit foncier			
	Housing (b)	Farms	Churches, etc.	Housing	Farms	Savings bank	Credit foncier
1965-66	26.9	2.8	1.8	26.1	0.3	88.8	192.8
1966-67	39.3	3.7	1.5	19.3	0.3	123.2	193.4
1967-68	52.5	3.3	1.4	11.6	0.3	166.5	184.9
1968-69	56.6	3.6	1.1	12.9	0.1	211.7	176.4
1969-70	59.3	3.5	0.9	14.8	..	255.0	169.8

(a) Excludes personal loans and loans to finance the extension of electric power lines in rural areas.

(b) Excludes loans to co-operative housing societies and deposits with the Home Finance Trust.

The reserves of the State Savings Bank at the end of each of the five years to 1969-70 were : 1965-66, \$35.1m ; 1966-67, \$36.8m ; 1967-68, \$40.4m ; 1968-69, \$42.1m ; 1969-70, \$44.6m.

History of the State Savings Bank, 1961 ; Further references, 1971

Private savings banks

Private savings banks in Victoria are part of a nation-wide savings bank network conducted by the wholly owned subsidiaries of each of the seven major private banks operating in Australia which are themselves public companies listed on local stock exchanges. Deposits with the private savings banks are guaranteed by the parent trading bank companies.

Private savings banks have been operating in Victoria since January 1956, when two of the banks commenced operations in this field. By July 1962 seven banks were participating in this business.

The following table shows the total amount of deposits in private savings banks in Victoria at 30 June in each of the years 1966 to 1970,

together with the proportion which these deposits bear to the total Victorian savings bank deposits :

**VICTORIA—PRIVATE SAVINGS BANKS :
DEPOSITS AND PROPORTION OF ALL
VICTORIAN SAVINGS BANK DEPOSITS**

At 30 June—	Deposits in Victoria	Proportion of deposits with all savings banks in Victoria
	\$'000	per cent
1966	447,865	25.7
1967	517,608	26.9
1968	577,647	27.7
1969	634,767	28.3
1970	686,409	28.8

At 30 June 1970 private savings banks had 1,114 branches and 1,116 agencies throughout Victoria.

Total deposits, etc., in savings banks

The next table shows the amount of depositors' balances in each savings bank in Victoria at 30 June 1966 to 1970. The total amount of deposits per head of population is also shown.

VICTORIA—SAVINGS BANKS : DEPOSITS

Savings bank	Depositors' balances at 30 June—				
	1966	1967	1968	1969	1970
	\$'000	\$'000	\$'000	\$'000	\$'000
State Savings Bank of Victoria (a)	893,410	966,056	1,033,644	1,104,088	1,163,381
Commonwealth Savings Bank of Australia	404,704	443,049	474,238	505,480	536,971
Private savings banks—					
Australia and New Zealand Savings Bank Ltd	123,859	138,241	152,339	166,107	176,569
The Bank of Adelaide Savings Bank Ltd	671	911	1,057	1,270	1,345
Bank of New South Wales Savings Bank Ltd	109,993	123,892	135,893	147,369	157,070
The Commercial Savings Bank of Australia Ltd	41,840	50,896	58,305	66,345	73,693
C.B.C. Savings Bank Ltd	53,743	59,669	64,504	69,463	74,255
E.S. and A. Savings Bank Ltd	49,474	59,977	68,797	76,655	83,880
The National Bank Savings Bank Ltd	68,285	84,022	96,752	107,558	119,597
Total deposits	1,745,979	1,926,713	2,085,529	2,244,335	2,386,761
	\$	\$	\$	\$	\$
Deposits per head of population	542.19	588.65	627.85	663.75	693.83

(a) Including school bank and deposit stock accounts, but excluding balances held in London.

Life insurance

The first purely mutual life office with headquarters in Victoria was established in 1869, although branches of other Australian and overseas insurance offices were operating in the Colony before this time. In 1969 there were forty-seven companies transacting life business in Victoria, compared with twenty in 1946, with assets throughout Australia of more than \$4,900m.

Section 51 (xiv) of the Commonwealth of Australia Constitution Act empowers the Commonwealth Parliament to legislate on insurance extending beyond any one State. Control of the activities of life offices in Victoria and the rest of Australia is vested in the Insurance Commissioner under the *Life Insurance Act* 1945–1965. The main categories of life insurance are ordinary, collector (industrial), and superannuation. Under a collector policy, premiums are payable to collectors at intervals of less than two months.

In general, there are five main types of life policy: whole of life, under which the amount of the policy, plus any bonuses, is payable on death; endowment insurance, which provides for payment of the sum insured, plus any bonuses, when the life insured reaches a specified age or date, or if death occurs before; "pure" endowment, under which the amount of the policy is payable, plus any bonuses, only if the life insured reaches a specified age or date (if death occurs before, all premiums paid are generally returned, plus compound interest); temporary insurance for short terms; and annuities. There are many variations of these five basic types available. Since 1946 the number of ordinary and superannuation life policies in force in Victoria has more than doubled to 1,336,140 at the end of 1969, and the total sum insured increased during the same period from \$379m to \$6,600m.

The following table gives some indication of the growth and volume of life insurance business conducted in Victoria during the period 1965 to 1969:

VICTORIA—LIFE INSURANCE: PREMIUM RECEIPTS AND POLICY PAYMENTS (INCLUDING ANNUITIES)
(\$'000)

Year	Premiums received (including single premiums)	Payments			
		Claims	Surrenders	Annuities and cash bonuses	Total
1965	126,574	42,583	18,946	1,807	63,336
1966	135,758	47,899	20,215	1,937	70,051
1967	150,452	49,549	22,495	2,084	74,128
1968	165,691	54,300	26,833	2,160	83,292
1969	184,696	59,655	32,413	2,132	94,201

The following table contains summarised information about new business written in Victoria by all life insurance companies during each of the five years 1965 to 1969:

**VICTORIA—LIFE INSURANCE: NEW POLICIES ISSUED
(EXCLUDING ANNUITIES)**

Particulars		1965	1966	1967	1968	1969
Ordinary business—						
Number of policies		91,577	90,534	99,900	109,475	117,981
Sum insured	\$'000	453,798	477,124	543,700	634,683	755,927
Annual premiums	"	9,867	10,180	11,807	14,952	16,970
Superannuation business—						
Number of policies		19,598	19,295	17,785	17,624	15,373
Sum insured	\$'000	307,483	290,222	348,803	423,265	533,588
Annual premiums	"	6,045	7,440	8,385	9,629	12,085
Industrial business—						
Number of policies		34,482	34,661	34,427	34,037	36,370
Sum insured	\$'000	33,610	35,866	38,311	39,643	45,579
Annual premiums	"	1,273	1,350	1,438	1,515	1,734

Sums insured under new policies issued during 1969 averaged \$6,407 in the ordinary department, \$34,709 in the superannuation department, and \$1,253 in the industrial department.

The following table gives particulars of the policies which were discontinued or reduced during each of the years 1967 to 1969 :

**VICTORIA—LIFE INSURANCE: POLICIES DISCONTINUED OR REDUCED
(EXCLUDING ANNUITIES)**

Cause of discontinuance	1967		1968		1969	
	Number of policies	Sum insured	Number of policies	Sum insured	Number of policies	Sum insured
ORDINARY BUSINESS						
		\$'000		\$'000		\$'000
Death or disability	5,789	11,513	5,997	12,850	6,097	13,572
Maturity, expiry, etc.	19,867	44,278	20,439	44,861	20,714	52,758
Surrender	23,191	71,031	26,047	82,419	28,213	94,194
Forfeiture	14,558	66,463	14,766	72,364	13,870	71,871
Other (a)	—50	8,690	—355	15,999	—293	16,906
Total	63,355	201,976	66,894	228,494	68,601	249,301
SUPERANNUATION BUSINESS						
		\$'000		\$'000		\$'000
Death or disability	498	4,863	510	5,024	584	5,907
Maturity, expiry, etc.	1,549	20,964	1,944	24,356	1,926	22,444
Surrender	9,244	76,268	8,204	99,990	7,570	139,755
Forfeiture	459	5,444	395	7,751	285	4,780
Other (a)	8,792	43,463	3,710	34,970	6,036	40,948
Total	20,542	151,003	14,763	172,092	16,401	213,835
INDUSTRIAL BUSINESS						
		\$'000		\$'000		\$'000
Death or disability	3,752	798	3,962	900	3,563	905
Maturity, expiry, etc.	22,550	3,154	21,239	3,279	22,875	3,655
Surrender	16,600	7,849	17,207	9,426	15,365	9,407
Forfeiture	6,929	9,121	7,652	10,208	7,916	10,712
Other (a)	843	325	502	454	—599	—56
Total	50,674	21,248	50,562	24,266	49,120	24,624

(a) Includes net loss or gain resulting from transfers, cancellations of, and alterations to, policies, etc.

NOTE. Minus sign (—) indicates an increase in existing business in the registers concerned due to an excess of transfers from other States or conversions from other classes of business over discontinuances in those registers.

The following table shows, for each of the years 1965 to 1969, particulars of life insurance business in existence in the relevant departments of the companies :

**VICTORIA—LIFE INSURANCE: BUSINESS IN EXISTENCE
(EXCLUDING ANNUITIES)**

Particulars	1965	1966	1967	1968	1969
Ordinary business—					
Number of policies	1,062,297	1,086,596	1,123,141	1,165,722	1,215,130
Sum insured \$'000	2,936,951	3,230,539	3,572,264	3,978,453	4,485,109
Annual premiums „	76,272	82,189	89,437	99,502	111,092
Superannuation business—					
Number of policies	121,849	122,125	119,368	122,229	121,010
Sum insured \$'000	1,226,995	1,346,885	1,544,686	1,795,859	2,114,374
Annual premiums „	26,823	33,777	38,914	44,586	52,951
Industrial business—					
Number of policies	830,578	788,952	772,705	756,180	743,268
Sum insured \$'000	264,161	276,027	293,090	308,467	329,395
Annual premiums „	10,979	11,261	11,085	12,325	13,057

In 1969 the average amount of policy held in the ordinary department was \$3,691, in the superannuation department, \$17,473, and in the industrial department, \$443.

Further references, 1962, 1964, 1967

Fire, marine, and general insurance

The insurance industry in Victoria, as in the whole of Australia, follows basic English underwriting principles and procedures which have been adapted over a century to meet local problems and conditions.

In Victoria, during the year 1969–70 over 270 companies, many with overseas affiliations, provided a range of policies and services comparable to those available in other countries. Organisation of the market may be summarised as follows :

1. tariff companies ;
2. non-tariff companies ;
3. representatives of brokers at Lloyds ;
4. State Government insurance offices ;
5. brokers operating in their own right in Australia ; and
6. local representatives of overseas re-insurance companies.

Types of insurance cover provided

The types of insurance cover issued by underwriters in Victoria are many and varied, including among others :

All risks	Marine
Baggage	Motor vehicle (physical damage)
Boiler explosion	Motor vehicle—third party (compulsory)
Burglary	Personal accident
Cash in transit	Plate glass
Crop (fire and hail)	Pluvius
Fidelity guarantee	Public liability
Fire and loss of profits	Tourists' and travellers' personal
Houseowners and householders	accident
Livestock	

Wool ("sheep's back to store")
Workers compensation (compulsory)

Compulsory covers

The Victorian Government, as is the case with other State Governments, legislates for workers compensation and motor vehicle (third party) insurances. All employers are compelled to insure their employees against death or physical injury during employment and under certain other circumstances. Every owner of a motor vehicle is compelled to insure against any liability for death or injury to others caused by, or arising out of, the use of such vehicle.

Statistics

Selected statistics relating to all classes of fire, marine, and general insurance are collected annually from insurers licensed to operate in Victoria. They refer to all policies issued in this State on Australian risks wherever situated, but do not include data for policies issued in other States to cover Victorian risks.

Returns are for the year ended 30 June or for the immediately preceding accounting periods of the insurers concerned. Since the accounting years of many insurers end on dates other than 30 June, the figures are not for a uniform time period.

The statistics have been compiled on the following basis :

1. Premiums are the total amounts received and receivable during the year for policies issued and renewed, after deduction of returns of premium and rebates and bonuses paid or credited to policy holders.
2. Claims consist of payments during the year plus the estimated amount of claims unsettled at the end of the year, less the estimated amount of claims unsettled at the beginning of the year.
3. Contributions to fire brigades, commission and agents' charges, and expenses of management are charges paid during the year.
4. Taxation consists of payments during the year for all forms of taxation including stamp duty, licence fees, and pay-roll tax as well as income tax.

It should be noted that the figures shown for premiums are different from the premium income earned by insurers during the year, as no adjustment is made for premiums unearned at the beginning and end of the year. When, as in recent years, the premium volume is increasing, the figures in the tables are greater than the premiums earned by insurers and the amount of the difference is often substantial. For this reason, the relationship of claims and other charges to premiums should be used only as a basis of comparison with ratios calculated under similar headings in previous years.

The following tables, which show details of fire, marine, and general insurance business transacted in Victoria during each of the years 1965-66 to 1969-70 should not be construed as "profit and loss statements" or "revenue accounts" as they contain selected items of statistics only :

VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE : PERCENTAGE OF CLAIMS TO PREMIUM INCOME

Class of business	1965-66	1966-67	1967-68	1968-69	1969-70
Fire	40.23	38.10	38.63	42.61	46.42
Householders' comprehensive	27.69	27.39	26.43	34.01	30.98
Sprinkler leakage	66.23	54.05	72.75	53.19	83.96
Loss of profits	36.34	25.65	29.39	49.11	20.91
Hailstone	59.63	168.25	107.05	46.89	142.71
Marine	61.25	56.97	60.36	68.68	66.04
Motor vehicles (other than motor cycles)	72.56	68.45	69.38	72.52	75.42
Motor cycles	69.23	57.45	46.17	61.54	70.34
Compulsory third party (motor vehicles)	103.11	98.13	108.83	92.74	126.42
Employers' liability and workers compensation	63.20	60.68	63.86	63.11	62.89
Personal accident	45.70	43.33	40.18	44.54	43.95
Public risk third party	52.48	59.85	54.87	37.15	52.39
General property	90.85	53.50	44.97	75.57	31.80
Plate glass	51.67	59.40	57.91	60.56	63.39
Boiler	19.67	25.00	25.69	18.79	33.77
Livestock	46.18	49.84	64.50	63.18	50.94
Burglary	69.75	85.65	65.88	62.52	53.67
Guarantee	24.87	28.33	20.97	14.57	16.03
Pluvius	23.53	45.65	31.47	37.21	69.77
Aviation	90.04	59.54	72.14	75.78	55.73
All risks	62.52	69.24	59.77	65.60	70.09
Contractors' all risks	..	50.40	74.79	104.65	45.90
Television	32.73	32.43	29.77	22.22	52.75
Other	38.26	32.13	41.37	33.37	34.40
All classes	62.89	57.84	59.18	59.44	67.35

VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE : TOTAL REVENUE : CLASS OF BUSINESS (\$'000)

Class of business	1965-66	1966-67	1967-68	1968-69	1969-70
PREMIUMS (LESS RETURNS, REBATES, AND BONUSES)					
Fire	25,728	27,182	29,699	31,485	34,604
Householders' comprehensive	11,939	13,372	15,535	17,137	19,934
Sprinkler leakage	77	74	83	94	106
Loss of profits	3,555	4,031	5,181	5,875	6,151
Hailstone	820	1,011	574	1,030	967
Marine	7,692	8,653	9,331	11,514	12,769
Motor vehicles (other than motor cycles)	47,797	53,011	56,173	58,426	65,927
Motor cycles	39	47	55	78	118
Compulsory third party (motor vehicles)	20,848	24,654	27,492	31,615	35,820
Employers' liability and workers compensation (a)	49,064	54,315	56,766	58,566	62,586
Personal accident	6,173	7,291	8,239	8,783	10,094
Public risk third party	3,049	3,848	4,860	5,496	6,414
General property	295	286	358	397	434
Plate glass	927	1,000	1,102	1,146	1,180
Boiler	122	232	301	298	610
Livestock	249	307	397	459	534
Burglary	3,005	3,623	3,984	4,925	5,394
Guarantee	386	420	601	597	655
Pluvius	51	46	42	43	43
Aviation	231	435	499	574	872
All risks	1,793	1,866	2,348	2,657	2,925
Contractors' all risks	..	1,127	1,187	1,548	2,063
Television	55	37	28	27	91
Other	2,509	2,652	3,051	4,354	4,724
Total premiums	186,402	209,519	227,886	247,124	275,014

(a) See references pages 181-3.

VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE: TOTAL REVENUE: CLASS OF BUSINESS—*continued*
(\$'000)

OTHER REVENUE (NET OF EXPENSES)					
Interest, dividends, rents, etc.	9,511	11,482	12,654	13,666	15,614
TOTAL REVENUE					
Grand total	195,913	221,001	240,540	260,790	290,627

VICTORIA—FIRE, MARINE, AND GENERAL INSURANCE: TOTAL EXPENDITURE: CLASS OF BUSINESS
(\$'000)

Class of business	1965-66	1966-67	1967-68	1968-69	1969-70
GROSS CLAIMS (LESS AMOUNTS RECOVERABLE)					
Fire	10,351	10,356	11,473	13,416	16,063
Householders' comprehensive	3,306	3,663	4,106	5,828	6,175
Sprinkler leakage	51	40	60	50	89
Loss of profits	1,292	1,034	1,523	2,885	1,286
Hailstone	489	1,701	615	483	1,380
Marine	4,711	4,930	5,632	7,908	8,433
Motor vehicles (other than motor cycles)	34,681	36,284	38,974	42,371	49,724
Motor cycles	27	27	25	48	83
Compulsory third party (motor vehicles)	21,497	24,192	29,920	29,321	45,282
Employers' liability and workers compensation	31,007	32,960	36,250	36,960	39,358
Personal accident	2,821	3,159	3,311	3,912	4,436
Public risk third party	1,600	2,303	2,667	2,042	3,360
General property	268	153	161	300	138
Plate glass	479	594	638	694	748
Boiler	24	58	77	56	206
Livestock	115	153	256	290	272
Burglary	2,096	3,103	2,625	3,079	2,895
Guarantee	96	119	126	87	105
Pluvius	12	21	13	16	30
Aviation	208	259	360	435	486
All risks	1,121	1,292	1,403	1,743	2,050
Contractors' all risks	..	568	888	1,620	947
Television	18	12	8	6	48
Other	960	852	1,262	1,453	1,625
Total claims	117,228	127,833	142,374	155,001	185,219
OTHER EXPENDITURE					
Contributions to fire brigades	4,168	4,842	5,542	6,078	6,871
Commission and agents' charges	18,232	20,227	22,071	24,106	26,982
Expenses of management	29,004	33,073	36,000	38,723	43,452
Taxation	4,505	5,216	7,288	7,749	9,144
Total other expenditure	55,909	63,358	70,901	76,656	86,449
TOTAL EXPENDITURE					
Grand total	173,138	191,191	213,275	231,658	271,667

NOTE. Minus sign (—) denotes a credit.

Motor vehicle insurance (compulsory third party)

The *Motor Car (Third Party Insurance) Act 1939* (now embodied in the *Motor Car Act 1958*) which came into force on 22 January 1941, made it compulsory for the owner of a motor vehicle to insure against any liability which may be incurred by him, or any person who drives such motor vehicle, in respect of the death of, or bodily injury to, any person caused by, or arising out of, the use of such motor vehicle.

VICTORIA—MOTOR VEHICLE INSURANCE (COMPULSORY THIRD PARTY) :
NUMBER OF MOTOR VEHICLES INSURED, 1969-70

Class of motor vehicle	Motor cars usually garaged—		Total
	Within a radius of 20 miles of the G.P.O., Melbourne	Outside a radius of 20 miles of the G.P.O., Melbourne	
Private and business	701,684	375,905	1,077,589
Goods carrying	93,343	125,644	218,987
Hire	4,130	2,720	6,850
Hire and drive yourself	1,026	113	1,139
Passenger transport	320	314	634
Miscellaneous	10,007	56,105	66,112
Motor cycle	10,156	9,513	19,669
Total	820,666	570,314	1,390,980

State Motor Car Insurance Office

The State Motor Car Insurance Office was established under the *Motor Car (Third Party Insurance) Act* 1939 for the purpose of enabling owners of motor cars to obtain policies of third party insurance required under that Act, and policies generally in relation to insurance of motor cars. Business commenced on 24 January 1941. The Office is managed and controlled by the Insurance Commissioner, and the policies issued are guaranteed by the Government of Victoria.

The proportion of total Victorian motor insurance business underwritten by the Office for the year 1969-70 represented 7.8 per cent of comprehensive and 40.5 per cent of third party premiums received in Victoria.

The following table shows the trading results for each of the five years 1965-66 to 1969-70 :

VICTORIA—STATE MOTOR CAR INSURANCE OFFICE : PREMIUMS
RECEIVED, CLAIMS PAID, ETC.
(\$'000)

Year	Premiums received less reinsurance, rebates, etc.	Increase in unearned premium provision	Claims paid and outstanding	Expenses	Underwriting loss
1965-66	11,154	1,428	10,195	771	1,240
1966-67	13,555	1,098	12,242	1,020	805
1967-68	14,665	629	15,745	1,136	2,846
1968-69	17,880	1,472	15,724	1,241	558
1969-70	19,625	829	31,149	1,472	13,825

At 30 June 1970 accumulated losses were \$16,306,380.

State Accident Insurance Office

The State Accident Insurance Office was constituted under the *Workers Compensation Act* 1914 for the purpose of enabling employers to obtain from the State policies of insurance indemnifying them against their liability

under the Workers Compensation Act, or at common law, or otherwise. The Office is managed and controlled by the Insurance Commissioner, and the policies issued are guaranteed by the Government of Victoria.

The Office is conducted on a mutual basis so that all profits, exclusive of amounts transferred to reserves and to Consolidated Revenue, are refunded as bonuses to policy holders.

The Office has made steady progress during 56 years of operation and, for the year ended 30 June 1970, its premium income represented 15.6 per cent of the total premiums received by all insurance companies in Victoria on account of employers' liability and workers compensation insurance.

The following table shows the trading results for each of the five years 1965-66 to 1969-70 :

VICTORIA—STATE ACCIDENT INSURANCE OFFICE : PREMIUMS
RECEIVED, CLAIMS PAID, ETC.
(\$'000)

Year	Premiums received less reinsurances, rebates, etc.	Increase in unearned premium provision	Claims paid and outstanding	Expenses	Underwriting profit
1965-66	9,200	694	6,949	558	999
1966-67	9,250	546	5,680	651	2,373
1967-68	9,155	-471	7,079	673	1,874
1968-69	9,911	- 23	8,204	691	1,040
1969-70	9,760	27	7,228	755	1,751

NOTE. Minus sign (-) denotes a reduction in unearned premium provision.

The amount transferred to consolidated revenue in 1969-70 was \$1,400,000, while the accumulated funds at 30 June 1970 were : General Reserve, \$8,720,000 ; Bonus Equalisation Reserve, \$2,278,105 ; and Building and Other Reserves, \$280,540.

Export Payments Insurance Corporation

The Corporation was established under the *Export Payments Insurance Corporation Act* 1956 to "promote trade with countries outside Australia by providing insurance against certain risks arising out of that trade not normally insured with commercial insurers and to give certain guarantees in connection with that trade". Its liabilities are guaranteed by the Commonwealth up to \$500m at any one time.

It commenced writing business in Sydney in the latter half of 1957, and in March 1958 its first branch was opened in Melbourne, responsible for the Corporation's business in Victoria and Tasmania. Branches have subsequently been opened in Adelaide, Perth, and Brisbane. The head office of the Corporation is in Sydney. It is a corporate body which can sue or be sued and is constituted by a commissioner who may refer matters for advice to a consultative council.

The Corporation is a member of the Union D'Assureurs Des Cr dit Internationaux, the international association of credit insurers, commonly known as the Berne Union. This is one of the main sources through which the Corporation obtains information on international trends in credit terms.

Many problems associated with the granting of credit, including the economic outlook and payment performances of the trading nations, are discussed at regular meetings of the Union.

Among the more recent additions to the facilities provided by the Corporation have been the introduction of unconditional guarantees to banks and other lending institutions to facilitate the financing of export transactions of \$1,000 or more sold on terms in excess of 180 days, and the insurance, on behalf of the Commonwealth Government, of certain investments overseas against risks of loss due to expropriation of property, inability to transfer earnings or repatriate capital to Australia, and damage to property resulting from war, insurrection, or similar happenings.

The following table shows particulars of the business of the Corporation for each of the years 1966-67 to 1969-70 :

AUSTRALIA—EXPORT PAYMENTS INSURANCE CORPORATION

Particulars	1966-67	1967-68	1968-69	1969-70
Business on Corporation's account—				
Number of policies and guarantees	613	692	746	809
	\$'000	\$'000	\$'000	\$'000
Face value of policies and guarantees current	238,648	271,075	298,829	343,064
Maximum contingent liability	123,966	141,108	158,966	190,067
Premium income	598	651	730	861
Operating costs	348	388	426	517
Claims paid (gross)	446	854	388	353
Recoveries	111	591	263	212
Underwriting reserve	1,126	1,420	1,897	2,401
Business on Government's account—				
Overseas investment insurance—				
Number of policies	15	29	41	56
	\$'000	\$'000	\$'000	\$'000
Face value of policies current	4,699	12,097	19,813	19,505
Maximum contingent liability	4,229	10,887	17,832	17,555
National interest insurance—				
Number of policies	(a) 4	(a) 5	1	2
	\$'000	\$'000	\$'000	\$'000
Face value of policies current	(a)1,931	(a)2,278	1,208	2,420
Maximum contingent liability	(a)1,741	(a)2,007	1,087	2,183

(a) Includes warehousing insurance.

The facilities provided by the Corporation compare favourably with those made available by the credit insurance organisations in other countries, thereby enabling Australian exporters to be competitive in matching the payment terms offered by their overseas competitors.

Further reference, 1970

Building societies

The provisions of the *Building Societies Act 1874* made it compulsory for building societies to effect registration. Current legislation regulating the activities of these societies is embodied in the *Building Societies Act 1958* and subsequent amending Acts.

The following table shows details of the operations of building societies in Victoria for the financial years 1968-69 and 1969-70 :

**VICTORIA—PERMANENT BUILDING
SOCIETIES (a)**

Particulars	1968-69	1969-70
Number of societies	40	46
Number of shareholders	11,385	16,188
Number of borrowers	(b) 18,044	(b) 19,330
Value of transactions—	\$'000	\$'000
Income—		
Interest on mortgage loans	5,206	6,786
Other	515	692
Total	5,721	7,478
Expenditure—		
Interest payable	2,999	3,950
Administration, etc.	743	1,047
Total	3,742	4,997
Loans and advances—		
Paid	27,545	33,020
Repaid	11,103	12,974
Deposits—		
Received	58,494	62,065
Repaid	35,115	49,880
Liabilities—		
Investing members' funds—		
Paid-up capital	19,511	27,218
Reserves, etc.	4,210	4,375
Borrowing members' funds—		
Share subscriptions	149	169
Other	27	20
Deposits	52,234	65,190
Loans (including bank overdraft)	5,821	7,585
Other	2,108	1,608
Total	84,059	106,164
Assets—		
Loans on mortgage	78,832	98,799
Land and house property	875	944
Other investments	2,778	3,580
Cash and deposits	1,136	2,335
Other	437	507
Total	84,059	106,164

(a) Excludes Starr-Bowkett Societies.

(b) Includes 720 shareholders holding borrowers' shares in 1968-69 and 1,204 in 1969-70.

Co-operative organisations

Co-operative organisations operating in Victoria are registered under the provisions of the Companies Act, the Industrial and Provident Societies

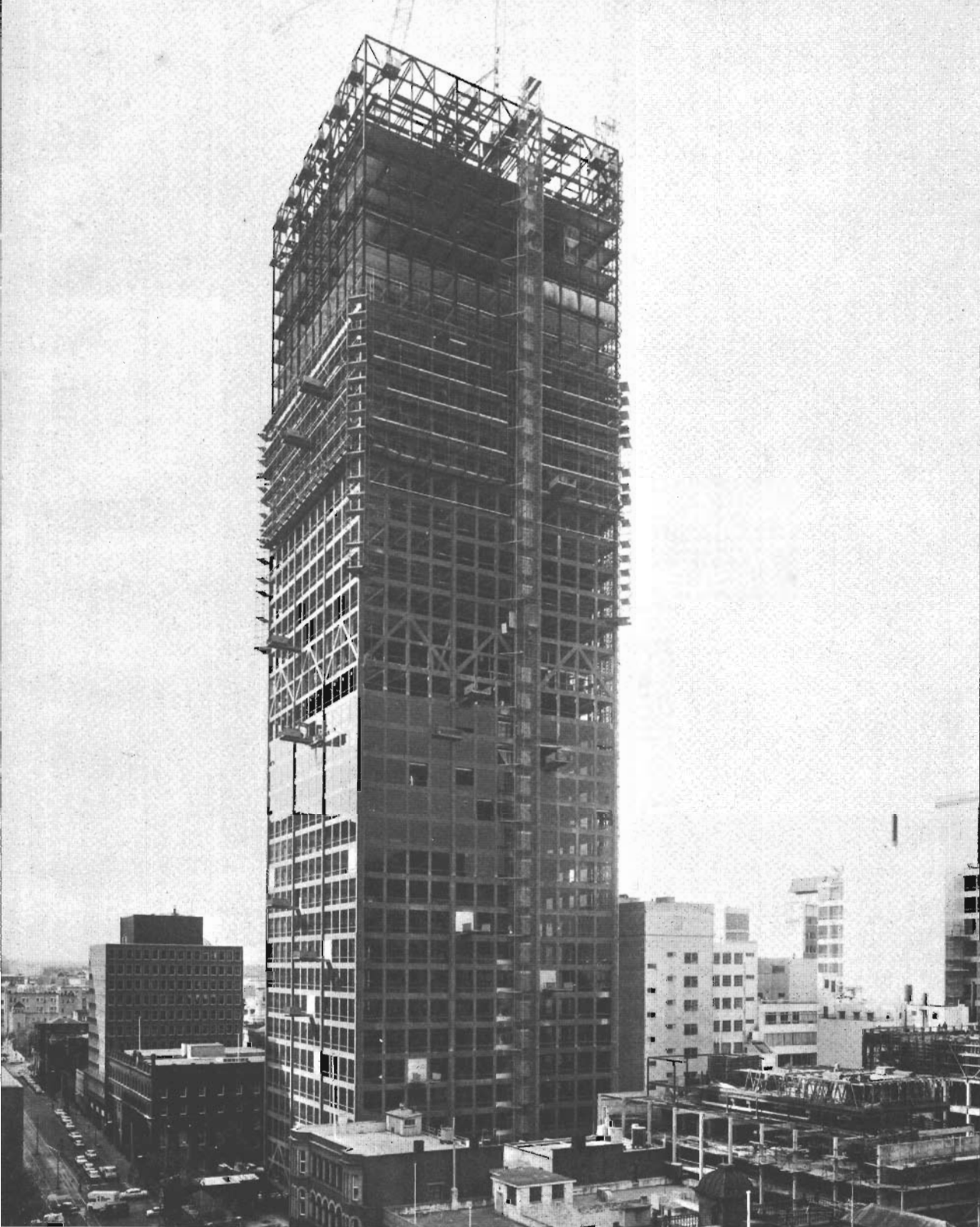
Act, the Co-operation Act, and the Co-operative Housing Societies Act. They are engaged in a number of activities chief among which are the production, marketing, and distribution of goods, and in the provision of finance for home building. In recent years, a considerable number of co-operative credit societies which extend credit facilities to members to enable them to finance the purchase of household durables, or to discharge financial liabilities, etc., have also been registered.

Particulars of producer and consumer societies for the year 1969-70 are given in the following table :

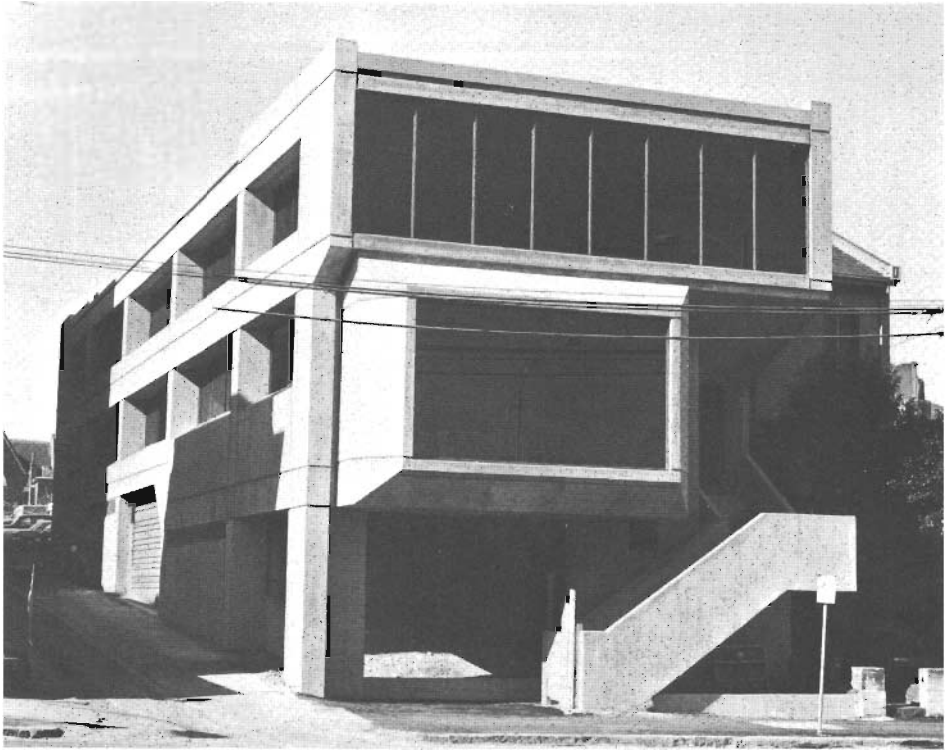
**VICTORIA—CO-OPERATIVE ORGANISATIONS : PRODUCER AND
CONSUMER SOCIETIES, 1969-70**

Particulars	Societies—			Total all societies
	Producers	Consumers	Producers and consumers	
Number of societies	92	52	10	154
Number of members	83,392	43,680	23,160	150,232
Value of transactions during the year—	\$'000	\$'000	\$'000	\$'000
Income—				
Sales	82,006	12,767	59,183	153,956
Other income	5,847	429	323	6,599
Total	87,853	13,196	59,506	160,555
Expenditure—				
Purchases	56,137	10,781	48,462	115,380
Working expenses, etc.	25,075	2,130	9,505	36,710
Interest on loans, etc.	956	134	234	1,325
Rebates and bonuses	1,524	166	56	1,746
Total	83,693	13,211	58,257	155,162
Dividend on share capital	910	63	462	1,435
Liabilities—				
Share capital	16,166	2,130	6,749	25,045
Loan capital	4,691	1,719	3,129	9,539
Bank overdraft	14,871	473	1,280	16,624
Accumulated profits	1,799	653	576	3,028
Reserve funds	18,185	815	5,115	24,115
Sundry creditors	12,715	1,929	6,660	21,305
Other	3,323	314	1,152	4,789
Total	71,750	8,035	24,661	104,445
Assets—				
Land and buildings	} 29,219	3,691	16,268	49,178
Fittings, plant, and machinery				
Stock	10,991	1,539	2,913	15,442
Sundry debtors	22,298	1,589	4,939	28,826
Cash in bank, on hand, or on deposit	1,971	385	313	2,669
Profit and loss account	2,874	550	..	3,425
Other	4,397	281	228	4,906
Total	71,750	8,035	24,661	104,445

Further reference, 1966



B.H.P. House, Melbourne's tallest building, under construction late in 1971.
The Broken Hill Proprietary Co. Ltd



The Plumbers and Gasfitters Employees Union reinforced concrete office building in Carlton.

Graeme Gunn Pty Ltd

Cluster housing at Winter Park, Doncaster.

Merchant Builders Pty Ltd



Co-operative credit societies

Since the passing of the *Co-operation Act* 1954, co-operative credit societies have made steady progress. The following table illustrates the growth of these societies during the period 1965-66 to 1969-70 :

VICTORIA—CO-OPERATIVE ORGANISATIONS : CREDIT SOCIETIES

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Number of societies	133	146	153	159	172
Number of members	22,496	26,641	31,363	35,905	43,857
Transactions during the year—	\$'000	\$'000	\$'000	\$'000	\$'000
Income—					
Interest	318	421	541	725	1,046
Other income	16	20	28	44	64
Total	334	440	570	769	1,110
Expenditure—					
Interest on deposits	177	237	314	408	587
Working expenses	106	146	201	293	476
Total	283	383	515	701	1,064
Liabilities—					
Share capital	214	244	294	342	406
Reserves	61	63	85	112	144
Depositors	4,080	5,481	7,094	9,444	13,541
Sundry creditors	47	53	74	71	72
Other	188	185	213	408	700
Total	4,590	6,027	7,761	10,377	14,862
Assets—					
Loans to members	3,962	5,209	6,571	8,947	12,616
Cash at bank or on hand	378	346	384	402	677
Other	250	472	806	1,028	1,570
Total	4,590	6,027	7,761	10,377	14,862

Public Trustee

The Public Trustee was constituted and incorporated by the *Public Trustee Act* 1939 (which came into operation in 1940) and became the successor in law of the Curator of the Estates of Deceased Persons, and of the Master-in-Equity with respect to the administration of mental patients' property.

He is empowered by the Public Trustee Acts, under the guarantee of the State of Victoria, to act as a trustee, executor, administrator, and attorney, and in certain other capacities, and is required to undertake the protection and management of the property of certified patients in mental hospitals and of infirm persons. An infirm person is a person certified by the Public Trustee to be incapable of managing his affairs on account of age or infirmity. Certificates in prescribed form (obtainable from the Public Trustee's Office) must be given by two medical practitioners acting independently of each other, before the Public Trustee may certify.

Any person may name the Public Trustee as his executor in his will, and may deposit such will with him for recording and safe custody. If the original will is not deposited with the Public Trustee, it is highly desirable

that a copy of the will be sent to him with the name and address of the person holding the original will. A person may also obtain advice about his will at the Public Trustee's Office if he intends to appoint him his executor.

The Public Trustee Acts enable the person appointed executor of a will to authorise the Public Trustee to act as executor in his place, and the next of kin of any one dying intestate, or any other person entitled to a grant of administration, may also authorise the Public Trustee to act as administrator in his place. In cases where there is no one else entitled and ready to apply for a grant of administration, the Public Trustee is authorised to apply for a grant of administration himself.

Consequent on the passing of the *Public Trustee Act* 1948, the Public Trustee Fund at the State Treasury was abolished and the proceeds of all estates, as from 1 October 1948, were invested in a Common Fund under the control of the Public Trustee. In the following table, particulars of the Common Fund are shown for each of the years 1965-66 to 1969-70 :

VICTORIA—PUBLIC TRUSTEE : COMMON FUND
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Proceeds of realisations, rents, interest, etc.	10,558	11,792	12,181	13,064	15,364
Investments, distributions, claims, etc.	8,850	9,344	10,700	10,244	13,572
Cash variation	1,708	2,448	1,481	2,820	1,792
Balance at 1 July	15,926	17,634	20,082	21,563	24,383
Balance at 30 June	17,634	20,082	21,563	24,383	26,175

The number of applications for probate and letters of administration (including election to administer), etc., made to the Public Trustee and the number of wills (under which the Public Trustee was appointed executor) lodged for safe custody for the years 1965-66 to 1969-70 are shown in the following table :

**VICTORIA—APPLICATIONS BY PUBLIC TRUSTEE
FOR PROBATE, LETTERS OF ADMINISTRATION, ETC.,
AND NUMBER OF WILLS LODGED FOR CUSTODY**

Year	Number of applications	Number of wills
1965-66	1,018	3,145
1966-67	1,120	2,555
1967-68	1,058	2,465
1968-69	1,050	2,659
1969-70	1,083	2,951

Trustee companies

A special Act of Parliament specifically authorises the seven Victorian trustee companies to act, among other things, as executor ; it also entitles them to apply for and to obtain probate of the will of a testator or, in

appropriate circumstances, to obtain letters of administration and to act as administrator of the estate of a deceased person.

The value of assets in estates committed to the care of Victorian trustee companies at 30 June for the years 1966 to 1970 is set out in the following table :

**VICTORIA—TRUSTEE COMPANIES : VALUE OF ESTATES
ADMINISTERED AT 30 JUNE
(\$m)**

Particulars	1966	1967	1968	1969	1970
Stock and debentures	108.5	109.9	123.5	127.0	131.7
Advances on mortgages	49.6	53.5	53.7	62.9	65.9
Property and livestock	75.9	76.8	74.5	77.5	78.4
Shares	177.7	193.7	205.6	226.5	232.4
Fixed and other deposits	11.0	11.6	12.5	20.7	20.9
Cash at bank	13.6	20.1	19.8	13.9	12.4
Other	22.8	20.0	21.3	23.1	26.8
Total	459.0	485.6	510.9	551.6	568.5

The values shown above are probate values or values of assets at the time of their being committed to the care of the trustee companies. Trustee companies may also be nominated as trustees for certain issues of debentures and notes, but the value of these issues is not included in this table.

Further reference, 1964

Probate

Under the general words of section 17 of the *Supreme Court Act* 1958, the Court has power to do everything which is necessary or desirable in connection with the grant of probate or administration.

The *Administration and Probate Act* 1958, section 6, confers jurisdiction on the Court to grant probate of the will or letters of administration of the estate of a deceased person leaving property, whether real or personal, within the State of Victoria. Grants are made to the executor of a will, the next of kin of an intestate, or the creditor of an intestate. A person receiving such a grant becomes the legal personal representative of the deceased, and is thus empowered to deal with all his assets and generally administer the estate.

Provision is made in Part III of the *Administration and Probate Act* 1958 for the sealing by the Supreme Court of probates or letters of administration which have been granted in Great Britain, Australia (other than Victoria), New Zealand, or certain British possessions, when the deceased has left real or personal estate in Victoria. The object of this provision is simply to put the executor or administrator under it in the same position as if he were an original executor or administrator.

The *Administration and Probate Act* 1958 also gives the Court jurisdiction to grant probate or administration of the estate of a person who is presumed to have died, but, in such a case, it prohibits the distribution of the estate without the leave of the Court.

The accompanying table shows the number and value of estates of deceased persons in connection with which probate or letters of administration, etc., were finally completed during each of the years 1966 to 1970. Particulars are excluded where liabilities equal or exceed the gross value of the estate.

VICTORIA—PROBATES, LETTERS OF ADMINISTRATION, ETC.

Year	Number of estates	Gross value of estates—		Liabilities	Net value of estates	Average net value per estate
		Real	Personal			
		\$'000	\$'000	\$'000	\$'000	\$
MALES						
1966	10,665	71,769	109,909	20,192	161,486	15,142
1967	11,474	78,302	137,043	25,028	190,317	16,587
1968	11,721	77,742	148,078	24,969	200,851	17,136
1969	12,145	94,691	163,244	30,974	226,961	18,688
1970	12,897	113,851	198,500	36,218	276,134	21,411
FEMALES						
1966	7,613	37,175	59,482	5,397	91,260	11,987
1967	8,294	42,262	69,057	7,423	103,896	12,527
1968	8,668	44,154	82,960	8,145	118,969	13,725
1969	8,631	47,137	84,678	8,597	123,218	14,276
1970	9,390	56,043	102,328	10,829	147,542	15,713
TOTAL						
1966	18,278	108,944	169,391	25,590	252,746	13,828
1967	19,768	120,564	206,100	32,451	294,213	14,883
1968	20,389	121,896	231,038	33,114	319,820	15,686
1969	20,776	141,828	247,922	39,571	350,179	16,854
1970	22,287	169,894	300,829	47,047	423,675	19,010

VICTORIA—NUMBER AND NET VALUE OF ESTATES OF DECEASED PERSONS

Group	1968		1969		1970	
	Number	Net value	Number	Net value	Number	Net value
		\$'000		\$'000		\$'000
\$						
Under 200	418	39	364	36	403	40
200— 599	799	309	763	290	804	308
600— 999	544	427	572	453	606	477
1,000— 1,999	1,212	1,778	1,187	1,741	1,150	1,700
2,000— 3,999	1,692	4,977	1,677	4,927	1,620	4,770
4,000— 5,999	1,247	6,159	1,127	5,572	1,215	6,017
6,000— 7,999	959	7,048	958	6,690	957	6,701
8,000— 9,999	864	7,795	882	7,915	984	8,837
10,000— 19,999	1,823	25,154	2,052	28,424	2,176	30,303
20,000— 29,999	648	15,865	745	18,125	780	19,162
30,000— 49,999	657	25,679	723	28,043	838	32,284
50,000— 99,999	550	37,921	679	46,764	871	60,397
100,000—199,999	221	29,415	305	41,411	354	48,352
200,000 and over	87	38,284	111	36,567	139	56,783
Total males	11,721	200,851	12,145	226,961	12,897	276,134

**VICTORIA—NUMBER AND NET VALUE OF ESTATES OF
DECEASED PERSONS—continued**

Group	1968		1969		1970	
	Number	Net value	Number	Net value	Number	Net value
		\$'000		\$'000		\$'000
\$						
			FEMALES			
Under 200	216	21	201	19	209	21
200- 599	548	215	520	205	511	199
600- 999	425	337	382	304	424	335
1,000- 1,999	856	1,272	871	1,284	860	1,271
2,000- 3,999	1,283	3,793	1,228	3,597	1,327	3,892
4,000- 5,999	960	4,741	946	4,664	1,004	4,991
6,000- 7,999	846	5,975	817	5,716	803	5,623
8,000- 9,999	727	6,529	740	6,658	802	7,203
10,000- 19,999	1,434	19,984	1,553	21,383	1,800	25,070
20,000- 29,999	526	12,806	508	12,436	578	14,224
30,000- 49,999	411	15,985	418	16,186	517	19,870
50,000- 99,999	311	21,127	301	20,676	350	23,877
100,000-199,999	88	12,458	107	13,807	149	20,194
200,000 and over	37	13,726	39	16,283	56	20,771
Total females	8,668	118,969	8,631	123,218	9,390	147,542
Grand total	20,389	319,820	20,776	350,179	22,287	423,675

Transfer of land

In Victoria there are two distinct types of title to land which has been alienated by the Crown. One is commonly known as a "General Law" title; the other as a "Torrens" or "Transfer of Land Act" title.

General Law Titles

The General Law system operated from the time of the first land transactions in the Port Phillip District. Although the Torrens system was introduced into Victoria in 1862 there were still at 31 December 1970, 1,768,376 acres under the General Law system—mainly situated in the early settled areas. Dealings in land under this system are carried out by deeds which operate to pass the title to the land on being executed by the conveying or granting party, and delivered to the purchaser or grantee. These deeds may be registered under the Property Law Act. This legislation provides for the mere recording of deeds and not for their certification. The State does not certify to the title as it does with the Torrens system. The only purpose or registration is to govern priority. Deeds are registered by filing a memorial (an extract of the relevant particulars) of the deed in the Registrar-General's Office.

Under the General Law system the title to a particular piece of land consists of a whole bundle of documents known as a chain of title. On any transaction with General Law land it is necessary for the solicitor for the purchaser or mortgagee to make a thorough study of the deeds in the chain of title and to search in the office of the Registrar-General to make sure that there are no conflicting deeds which have priority by virtue of their registration.

Transfer of Land Act

The Torrens system was introduced in Victoria by the *Real Property Act* 1862. All land alienated in fee by the Crown after 2 October 1862 (and leasehold granted by the Crown after 9 September 1863) is under the operation of the Transfer of Land Act. Before 1862, 5,142,321 acres had been alienated by the Crown and were being dealt with under the General Law system. Since that date some 26 million acres have been alienated and all of this land automatically came under the Transfer of Land Act on the issue and registration of the relevant Crown grants and leases. Provision is made for the bringing of land alienated before 1862 under the operation of the Transfer of Land Act, by voluntary application. The present Transfer of Land Act contains provisions for the voluntary conversion of General Law titles and also provides that land may be brought under the Act by direction of the Registrar. So far little use has been made of the compulsory provisions.

The Torrens system is based on the fundamental principle that the title to land and to interests in land (such as the interest of mortgagees, annuitants, etc.) depends upon registration of written instruments signed by the parties to the respective transactions and not upon the written deeds themselves.

The document of title to land under the Transfer of Land Act consists of a certificate of title setting out a description identifying the land and a statement certifying who is the registered proprietor. This statement is conclusive evidence and is guaranteed by the Government. On the registration of each new transfer the State certifies the title anew and this certificate operates in favour of a person dealing without fraud and for value as if it were a new grant of the land from the Crown. Certificates of title and Crown grants are in duplicate, the original being retained in the Office of Titles and the duplicate being held by, or on behalf of, the registered proprietor. The title is said to be indefeasible or incapable of being challenged or upset except in certain specified events, the chief among these being actual fraud.

Certain interests in land under the Act can be created by a registered proprietor of that land and registered on the title. These include mortgages, leases, charges, easements, and restrictive covenants.

Any certificate of title can be searched at the Titles Office for a small fee, and any person intending to deal with the registered proprietor of the land is not concerned to go behind any of the entries shown on that title. The certainty and accuracy of these particulars can be assumed.

Since 1953 there has existed in Victoria a method for the subdivision of land in strata and the issue of individual titles to flats (see page 684 of the *Victorian Year Book* 1966). The *Strata Titles Act* 1967 introduced into Victoria a further method for the subdivision of land in strata. Existing methods can still be used as registration of a plan under Part II of the Strata Titles Act is not compulsory. The Act (except as to Part IV) came into operation on 1 July 1967. Part IV of the Act operated as from 1 December 1967. Further information about the Strata Titles Act is set out on pages 695-6 of the *Victorian Year Book* 1968. During the year ended 30 June 1970, 862 plans were lodged for registration under the new Act.

Assurance Fund

Complementary to the certification of title there is an Assurance Fund. Out of this fund, persons who sustain loss or damage (whether by deprivation of land or otherwise) through the operation of the Transfer of Land Act may be indemnified. This fund is built up by contributions levied upon applicants first bringing land under the Act and upon grantees of Crown land at the rate of 1 cent for every \$5 of the value of the land applied for or the price paid to the Crown, and by contributions levied by the Registrar on various other applications where any uncertainty or risk is involved.

During the financial year 1969-70 receipts of the fund comprised contributions of \$20,622 and interest on stock of \$6,538. Claims of \$1,198 were met from the fund during the year. The sum of \$10,189 was paid out in accordance with section 3 of the *Special Funds Act 1920* to provide for interest on loan moneys expended on university buildings. The balance at the credit of the Assurance Fund at 30 June 1970 was \$411,201. The total amount paid to 30 June 1970 as compensation and for judgments recovered, including costs, was \$44,672 in respect of 154 claims.

Further reference, 1968

Titles of land issued

The following table shows the number of titles of land issued during each of the years 1966 to 1970 :

VICTORIA—TITLES OF LAND ISSUED

Year	Number of—			
	Certificates of title	Crown grants	Crown leases	Total titles
1966	53,660	1,063	315	55,038
1967	49,476	1,221	461	51,158
1968	53,422	1,223	256	54,901
1969	51,002	834	229	52,065
1970	54,636	988	237	55,861

Land transfers, mortgages, etc.

A summary of dealings lodged at the Titles Office under the Transfer of Land Act is given in the following table for each of the years 1966-67 to 1969-70 :

VICTORIA—DEALINGS LODGED AT THE TITLES OFFICE UNDER THE TRANSFER OF LAND ACT

Year	Number of transfers	Mortgages (a)		Number of—				Total dealings
		Number	Amount	Entries of executor, administrator, or survivor	Plans of subdivision	Caveats	Other dealings	
1966-67	109,192	58,057	\$'000 475,260	15,707	4,340	17,769	67,601	272,666
1967-68	110,618	60,073	531,764	15,688	4,149	18,436	74,733	283,717
1968-69	115,367	63,367	595,570	15,966	4,438	19,839	79,079	298,076
1969-70	118,957	65,005	675,651	15,888	4,501	21,584	84,276	310,211

(a) Excluding certain mortgages, principally to trading banks to secure overdrafts on current accounts.

Mortgages, reconveyances, and conveyances registered at the Office of the Registrar-General under the *Property Law Act* 1958 are shown for each of the years 1966-67 to 1969-70 in the following table :

VICTORIA—DEALINGS UNDER THE PROPERTY LAW ACT

Year	Mortgages (a)		Reconveyances		Conveyances	
	Number	Amount	Number	Amount (b)	Number	Amount
		\$'000		\$'000		\$'000
1966-67	1,128	11,783	1,370	2,592	3,032	28,189
1967-68	1,173	12,894	1,410	2,884	3,059	28,531
1968-69	1,342	16,392	1,436	2,858	2,896	41,268
1969-70	993	14,095	1,444	4,747	3,112	35,414

(a) Excluding certain mortgages, principally to trading banks to secure overdrafts on current accounts.

(b) Excluding repayments designated "principal and interest".

Mortgages of real estate

Details of mortgages lodged for registration under the Transfer of Land Act and the Property Law Act (mentioned in the two preceding tables) are shown in the following table.

Certain mortgages (principally to trading banks to secure overdrafts on current accounts) have not been included in the figures as only the number of such mortgages, and not the amounts involved, are available.

Particulars of mortgages not lodged for registration are not available.

The number of mortgages and the amount of consideration involved for each of the years 1967-68 to 1969-70, classified according to type of mortgagee, are as follows :

VICTORIA—MORTGAGES OF REAL ESTATE LODGED FOR REGISTRATION

Type of mortgagee	Mortgages (a)					
	1967-68		1968-69		1969-70	
	Number	Amount	Number	Amount	Number	Amount
		\$'000		\$'000		\$'000
Banks	21,155	152,584	23,425	181,655	22,571	180,556
Building societies	2,686	18,722	3,638	28,689	4,305	36,917
Co-operative housing societies	4,260	29,011	3,289	22,486	2,818	20,821
Insurance companies	2,487	57,390	2,628	52,942	2,650	59,763
Government institutions	4,245	29,698	4,833	31,771	4,204	34,454
Trustee institutions	406	8,692	537	13,217	473	13,055
Other mortgagees	26,007	248,558	26,359	281,199	28,977	344,179
Total	61,246	544,655	64,709	611,959	65,998	689,746

(a) Excluding certain mortgages, principally to trading banks to secure overdrafts on current accounts.

Stock mortgages and liens on wool and crops

The number and amount of stock mortgages, liens on wool, and liens on crops registered at the Office of the Registrar-General during each of the years 1966 to 1970 are shown in the following table. Releases of liens are not required to be registered as, after the expiration of twelve months, the registration of all liens is automatically cancelled. Very few mortgagors of stock secure themselves by a registered release.

VICTORIA—STOCK MORTGAGES AND LIENS ON WOOL AND CROPS

Security		1966	1967	1968	1969	1970
Stock mortgages—						
Number		301	468	494	484	861
Amount	\$'000	790	1,366	1,529	1,629	1,174
Liens on wool—						
Number		31	15	15	29	31
Amount	\$'000	116	139	178	323	138
Liens on crops—						
Number		87	71	429	429	180
Amount	\$'000	195	174	526	459	353
Total—						
Number		419	554	938	942	1,072
Amount	\$'000	1,101	1,679	2,233	2,411	1,665

Bills of sale

The following are the numbers and amounts of bills of sale which have been filed at the Office of the Registrar-General during each of the years 1966 to 1970 :

VICTORIA—BILLS OF SALE

Security		1966	1967	1968	1969	1970
Bills of sale—						
Number		9,360	17,248	22,265	26,773	27,133
Amount	\$'000	15,679	24,194	30,077	36,755	40,850

Companies*Company legislation*

In recent years the Victorian Parliament has given much attention to company legislation and, following the passage of a new Companies Act in Victoria in 1958, company legislation has been passed throughout the Commonwealth in substantially similar form. In Victoria the current legislation is the *Companies Act* 1961 and subsequent amendments.

The following table shows details of companies registered during each of the years 1966 to 1970 :

VICTORIA—COMPANIES REGISTERED, ETC.

Particulars	1966	1967	1968	1969	1970
	number	number	number	number	number
New companies registered—					
Victorian	3,089	3,304	4,138	4,751	5,634
Other	285	333	345	429	552
Total	3,374	3,637	4,483	5,180	6,186
	\$'000	\$'000	\$'000	\$'000	\$'000
Nominal capital of new companies—					
Victorian	130,379	122,276	162,878	212,023	418,939
Other	201,363	205,366	307,795	450,731	559,613
Total	331,742	327,642	470,673	662,754	978,552

VICTORIA—COMPANIES REGISTERED, ETC.—*continued*

Particulars	1966	1967	1968	1969	1970
	'000	'000	'000	'000	'000
Approximate number of existing companies (at end of year)—					
Victorian	44	47	50	54	59
Other	3	4	4	4	4
Total	48	50	54	58	63
	\$'000	\$'000	\$'000	\$'000	\$'000
Increase in nominal capital of Victorian companies during year	210,726	217,980	268,159	536,469	803,510

Further reference, 1966; Company registration fees, 1964

Stock Exchange of Melbourne

The Stock Exchange of Melbourne was established in 1859. Over the years there has been continuous growth in share ownership and large amounts of capital have been raised for public works and for the expansion of industry. In these ways the Stock Exchange has played an important role in the economic development of the Commonwealth as well as of the State.

The basic function of the Stock Exchange is to provide the means by which investment securities, stocks, bonds, shares, etc., may be conveniently bought and sold. The type of market has varied over the years from the "call-room" style of trading to the present post-trading method which is practised in most exchanges throughout the world.

The Stock Exchange of Melbourne was incorporated as a company limited by guarantee under the Companies Act on 1 July 1970 in order to enable the Exchange to operate more efficiently as a legal entity. As a result of incorporation the annual balance date of the Exchange was altered from 30 September to 30 June. New Memorandum of Association and Articles of Association were adopted to replace the former Rules and Regulations. The former committee members of the Association, as it was then known, were appointed committee members of the new company. At 30 June 1970 membership numbered 169 and in addition there were 31 non-member partners.

Official list

To provide for changing conditions and new developments two further supplements to the Official List Requirements of the Australian Associated Stock Exchanges were issued during 1969–70. The principal changes referred to mining companies, particularly prospectuses.

At 30 June 1970, 3,367 quoted issues (including options) with a nominal value of \$16,650m and a market value of \$31,995m were quoted on the Exchange. The market value was an all-time record, being 5 per cent higher than the previous year. The market value of \$8,673m in Commonwealth loans represented 27 per cent of all securities listed.

In the nine months to 30 June 1970, 107 new companies with a combined nominal capital of \$212m were added to the official list and new capital issues made by companies already listed totalled \$462m. At 30 June 1970

the official list comprised 983 companies—747 industrial and 236 mining companies. Because of acquisitions, mergers, liquidations, etc., 31 companies were removed from the official list during the year.

In the following table the number of issues (including options) and their nominal value are classified according to type of security. Particulars are shown at 30 September for each of the years 1967 to 1969 and at 30 June for 1970:

MELBOURNE STOCK EXCHANGE—ISSUES LISTED (a) AND
NOMINAL VALUE

Class of security	Listed at 30 September—						Listed at 30 June 1970	
	1967		1968		1969			
	No. of issues	Nominal value	No. of issues	Nominal value	No. of issues	Nominal value	No. of issues	Nominal value
		\$m		\$m		\$m		\$m
Commonwealth loans	53	8,031	51	8,269	65	9,099	67	9,364
Semi-government and Fiji loans	822	888	906	887	946	969	955	901
Company debentures	684	854	687	963	778	1,209	801	1,345
Company unsecured notes	211	222	188	213	162	204	147	188
Preference shares	244	144	240	141	235	149	237	142
Industrial	775	3,237	776	3,516	790	3,691	799	3,913
Mining	130	445	155	527	261	702	361	797
Total	2,919	13,821	3,003	14,516	3,237	16,023	3,367	16,650

(a) Includes options.

Turnover

In 1969–70 the volume of turnover of loan securities (measured in units of one dollar) fell by 33 per cent to 173.6 million units, the lowest for five years. Sales of Commonwealth loans declined by 39 per cent to 139.7 million units. Turnover of share securities rose by 139 per cent to 1,369.8 million units with sales of mining shares increasing by 280 per cent to 1,122.6 million units while industrial turnover was 10 per cent lower at 245.0 million units. The monthly peak in share turnover by volume was reached in October for mining shares with a turnover of 216.0 million units and in February for industrials with a turnover at 31.0 million units.

The following table shows details of the volume of turnover of securities during each of the years 1965–66 to 1969–70:

MELBOURNE STOCK EXCHANGE—VOLUME OF TURNOVER OF SECURITIES
(million units)

Class of security	1965–66	1966–67	1967–68	1968–69	1969–70
Commonwealth loans	249.5	170.0	166.6	228.8	139.7
Semi-government and Fiji loans	14.9	19.2	12.1	12.2	15.5
Company debentures, unsecured notes	11.1	15.7	16.2	16.2	18.4
Total loan securities	275.5	204.9	194.9	257.2	173.6
Preference shares	2.4	2.0	2.3	3.3	2.2
Industrial	110.4	137.8	235.0	273.2	245.0
Mining	40.1	65.1	228.9	296.0	1,122.6
Total share securities	152.9	204.9	466.2	572.5	1,369.8

The turnover value of all securities in 1969-70 was \$1,368.7m, 14 per cent higher than for the previous year. The largest rise was 80 per cent in the mining section, while industrial ordinary shares were down 21 per cent to \$377.2m. The monthly peak in share turnover by value for mining shares was reached in January when sales amounted to \$124.8m and for industrials it occurred in February when turnover amounted to \$46.8m. There was a sharp fall in share turnover by value (industrial and mining) in the period March to May with a partial recovery in June.

In the following table the number of transactions and value of turnover for all securities are shown for each of the years 1966-67 to 1969-70 :

MELBOURNE STOCK EXCHANGE—NUMBER OF TRANSACTIONS AND VALUE OF TURNOVER OF STOCKS AND SHARES

Class of security	1966-67		1967-68		1968-69		1969-70	
	Trans- actions	Value	Trans- actions	Value	Trans- actions	Value	Trans- actions	Value
	'000	\$m	'000	\$m	'000	\$m	'000	\$m
Commonwealth loans	15.2	171.0	11.9	167.2	12.2	231.5	11.4	132.0
Semi-government and Fiji loans	4.8	19.1	4.4	12.0	4.1	12.0	4.2	15.0
Company debentures, unsecured notes	8.3	14.9	7.5	15.5	6.2	15.6	6.7	17.7
Total loan securities	28.3	205.0	23.8	194.7	22.5	259.1	22.3	164.7
Preference shares	4.1	2.6	4.6	2.9	4.4	3.9	2.8	3.0
Industrial	266.8	193.9	431.4	472.7	439.9	478.8	352.0	377.2
Mining	139.0	92.9	496.1	423.6	486.8	458.6	921.3	823.8
Total share securities	409.9	289.4	932.1	899.2	931.1	941.3	1,276.1	1,204.0
Grand total	438.2	494.4	955.9	1,093.9	953.6	1,200.4	1,298.4	1,368.7

Share Price Index

The Melbourne Share Price Index, which comprises a series of indexes, was introduced on 1 July 1963 with a base date of January 1960, although the 50 Leaders series dates back to 1948. In 1964 three additional groups (Preference Shares, Gold, and Oil and Gas), which are not included in the All Ordinaries Index were added, but in June 1967 the Gold Index (number 19) was discontinued and merged into Group 15—Metals and Minerals. At 30 June 1970 the Share Price Index comprised nineteen indexes :

Numbers 1-15 Industrial Groups

16 All Ordinaries (covering 1-15 inclusive)

17 50 Leaders

18 Preference Shares

20 Oil and Gas

The indexes measure changes in Aggregate Market Value (AMV), the base AMV being derived by multiplying the number of shares issued by their respective prices at the base date. The 50 Leaders Index is calculated twice daily, once in the morning and once in the afternoon, to measure short-term trends.

In response to requests from security analysts two further group indexes have been developed :

Number 21 All Ordinaries (excluding 50 Leaders)

22 All Ordinaries (excluding Metals and Minerals).

As from 1 October 1970 the new indexes have been published daily, bringing the index coverage to 21 groups.

In June 1970 the All Ordinaries Index stood at 206.24 as against 199.64 in June 1969, reaching its highest point for the year 1969-70 at 242.65 in January. The 50 Leaders Index recorded 226.76 in June 1970 compared with 230.41 in June 1969, the highest point for 1969-70 being 264.43 in January.

At 30 June 1970 the market value of all ordinary shares in the official list was \$20,854m. At that date the market value of ordinary shares of all companies included in the All Ordinaries and Oil and Gas Indexes was \$19,720m or 95 per cent of the total.

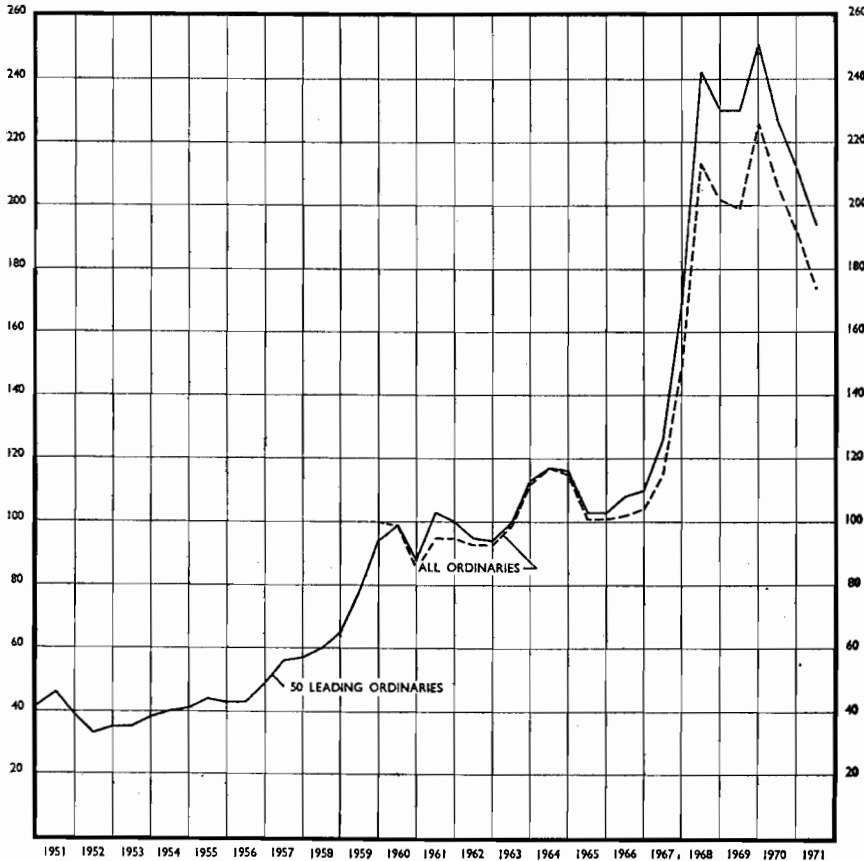


Figure 11. Melbourne Share Price Index: 50 Leading Ordinary Shares 1951-1971: All Ordinaries 1960-1971: Base January 1960 = 100 (To June 1963 Index calculated at end of June and December; thereafter the monthly average for June and December.)

Computer

Planning continued during the year for the introduction of the computerised communication network and subscriber testing of the system commenced at the beginning of 1970. Arrangements for the installation of Quotron inquiry units and telex machines were completed. The computer and Quotron service commenced commercial operation on 8 October 1970.

Conclusion

In the mining market interest again centred on the search for nickel. However, restricted interest was shown in oil and gas developments, but despite the small number of new discoveries development of known fields continued steadily. To cope with the volume of transactions trading hours were extended in February 1970, opening at 9.30 a.m. and closing at 2 p.m. to provide 4½ hours of continuous trading. As volumes declined the lunch break was re-introduced in June, giving 4 hours of trading between 9.30 a.m. and 3 p.m. On 27 August 1970 the Federal Treasurer introduced amendments to the Income Tax Act to allow tax deductions for interest paid on convertible securities, these having been disallowed since 1960.

Short-term money market

The short-term money market in Australia includes nine dealer companies which specialise in the business of borrowing money, investing borrowed funds in an approved range of assets, and buying and selling such assets. Four of these companies have head offices in Melbourne and five in Sydney but there are representatives in all other State capitals, Canberra, Launceston, Darwin, and Port Moresby.

Known as authorised dealers, each of these dealer companies has been accredited by the Reserve Bank. Such accreditation has significance both for the dealers and for their clients, the most important aspect being that by acting as "lender of last resort" the Bank provides liquidity to dealers, in that they can borrow from the Bank against the bulk of their assets. The Bank does not, however, accept responsibility for the repayment of a dealer's individual loans or for solvency generally.

The Bank also trades in Commonwealth Government securities with dealers and provides a range of other facilities which contribute to the efficient operation of the market. The Bank maintains special clearing accounts for dealers, by means of which funds can be quickly transferred from one point in Australia to another, and a safe custody system for dealers' holdings of Commonwealth Government securities, which makes possible the safe and rapid movement of security for loans from one lender to another.

Each dealer company is required by the Reserve Bank to have capital paid up in cash of not less than \$400,000 and to limit the amount of loans it accepts to a specified multiple of its shareholders' funds. Dealers accept loans overnight, at call, or for fixed periods, in minimum amounts of \$50,000. They must provide lenders with full security for loans, the onus being on each lender to satisfy himself that the security accepted by him is adequate. The determination of an appropriate margin of value of the security over the amount of any loan is a matter for negotiation solely between lender and dealer.

Lenders to the dealers include trading banks, savings banks, public authorities, and a wide variety of companies. The availability of funds from different groups is seasonal and highly variable; some of this variability is offsetting. The weekly average volume of loans accepted by the nine dealers is over \$300m and such loans turn over very frequently.

AUSTRALIA—SHORT-TERM MONEY MARKET: AUTHORISED DEALERS'
LIABILITIES CLASSIFIED BY TYPE OF CLIENT (a)
 (\$m)

Clients	At 30 June—				
	1966	1967	1968	1969	1970
All trading banks	91.1	121.5	117.6	90.0	158.4
Savings banks	35.6	56.2	26.5	36.0	37.3
Insurance offices	12.5	10.8	20.1	32.4	24.4
Superannuation, pension, and provident funds	6.2	11.7	4.6	8.9	16.6
Hire purchase and other instalment credit companies	6.3	5.9	2.8	2.4	7.9
Companies (not elsewhere included)	95.1	120.2	156.8	140.3	143.7
Commonwealth and State Governments	30.4	57.4	78.1	62.3	47.7
Local and semi-government authorities (not elsewhere included)	51.0	56.5	72.2	75.3	87.7
All other lenders (including marketing boards and trustee companies)	18.4	33.6	20.6	45.9	36.2
Total	346.5	473.7	499.3	493.4	559.9

(a) Liabilities to Reserve Bank as lender of last resort are excluded.

The rates of interest paid by dealers for funds of different maturities vary not only from dealer to dealer but also from day to day—and even during the day—depending on the general funds position and the judgment of individual dealers as to future trends in interest rates, the availability of funds, fluctuations in the value of their security portfolios, etc.

The margin between the interest outgoings on borrowed money and the income earned on investments, together with the income earned in the course of security dealing, needs to be sufficient to cover operating costs, profits, and the accumulation of reserves.

AUSTRALIA—SHORT-TERM MONEY MARKET: AUTHORISED DEALERS:
INTEREST RATES
 (per cent per annum)

Month	Interest rates on loans accepted during month				Weighted average interest rate on loans outstanding (a)
	At call		For fixed periods		
	Minimum	Maximum	Minimum	Maximum	
June 1966	3.00	6.10	4.25	5.80	4.73
June 1967	2.00	6.50	3.00	5.50	4.46
June 1968	3.00	6.75	3.75	5.40	4.29
Sept. 1968	0.50	6.50	3.25	5.75	4.07
Dec. 1968 (b)	1.00	6.25	3.25	6.00	4.18
Mar. 1969	1.00	7.00	2.50	6.00	4.13
June 1969	2.00	7.50	4.00	6.75	4.59
Sept. 1969	3.00	7.50	3.50	6.10	4.54
Dec. 1969 (b)	2.00	7.75	3.00	7.00	4.40
Mar. 1970	1.00	8.75	2.75	8.00	4.45
June 1970	3.50	8.80	4.50	8.50	6.12

(a) Weighted average of weekly figures.

(b) Excludes one Wednesday.

The Bank closely supervises the range of assets which the authorised dealers may acquire. The great bulk of each dealer's assets must comprise

government securities maturing within five years. (It is against these securities that dealers can borrow under the last resort facility.) As well as Treasury notes and other Commonwealth Government securities, a dealer may hold within this group of assets a limited amount of securities of public authorities (i.e., semi- and local government). Dealers may also deal in and hold bank endorsed or accepted commercial bills (without formal limit as to maturity), banks' Certificates of Deposit maturing within five years, and non-bank commercial bills maturing within 180 days. A very small part of a dealer's funds may be held in such other assets as the dealer chooses.

Dealers stand ready to buy and sell securities; aggregate figures of turnover of Commonwealth Government bonds and notes often exceed \$100m per week over the year for the dealers as a whole.

AUSTRALIA—SHORT-TERM MONEY MARKET: AUTHORISED DEALERS:
SELECTED ASSETS (a)
(\$m)

Month	Commonwealth Government securities (face value)			Commercial bills	Banks' Certificates of Deposit
	Treasury notes	Other	Total		
June 1966	10.7	362.6	373.3	25.2	(c)
June 1967	13.7	454.1	467.7	32.8	(c)
June 1968	116.2	375.1	491.3	35.7	(c)
Sept. 1968	148.6	389.9	538.5	29.6	(c)
Dec. 1968 (b)	132.1	412.2	544.3	23.0	(c)
Mar. 1969	181.0	399.1	580.2	17.0	5.4
June 1969	46.4	459.2	505.6	28.9	15.0
Sept. 1969	73.4	453.5	526.9	42.2	3.4
Dec. 1969 (b)	76.6	482.2	558.8	32.5	5.5
Mar. 1970	85.3	522.5	607.8	38.6	3.9
June 1970	7.6	567.7	575.4	38.3	3.6

(a) Average of weekly figures.

(b) Excludes one Wednesday.

(c) Not applicable.

Finance companies

A comprehensive account of the scope of statistics relating to the lending operations of finance companies and fuller details of the transactions of finance companies are provided in the bulletin *Finance Companies, 1969-70*. Finance companies, like other financial institutions, are distinguishable from non-financial institutions in that they deal mainly in financial assets as opposed to physical goods and non-financial services. However, while the various classes of financial institutions are commonly acknowledged as being different in some way or other, one from another, it is difficult to formulate precise and mutually exclusive definitions in respect of each class. For the purpose of these statistics, finance companies are defined as companies which are engaged mainly in providing to the general public (businesses as well as private persons) credit facilities of the following types: hire purchase and other instalment credit for retail sales, wholesale hire purchase, other consumer and commercial loans, and factoring. The finance companies covered in these statistics, insofar as they provide instalment credit for retail sales, are also included in the statistics of instalment credit for retail sales (see pages 690-2). The statistics exclude those

finance companies which are not subsidiaries of other finance companies and have total balances outstanding of less than \$100,000.

In general, companies which are engaged both in financing activities and other activities come within the scope of these statistics, provided that the major portion of their assets consists of financial assets of the types listed above or a major portion of their income is derived from such assets. Companies are excluded if the major portion of their balances outstanding consists of agreements written for the purpose of financing their own sales. Companies which are engaged mainly in financing, in any way, the operations of related companies ("related" as defined in the Companies Act) are also excluded from these statistics, as are unincorporated finance businesses. Also excluded are the following classes of financial and quasi-financial institutions: banks; life insurance companies; fire, marine, and general insurance companies; short-term money market companies; pastoral finance companies; investment companies; unit trusts, land trusts, mutual funds and management companies for the foregoing trusts and funds; pension and superannuation funds; building and friendly societies including credit unions; and all companies engaged in leasing and bill of exchange financing other than finance companies (as defined above) and their related companies.

Statistics are also collected on loans by finance companies to related non-finance companies; leasing of business equipment and plant by finance companies and their related companies; and the drawing and discounting of bills of exchange by finance companies and their related companies.

VICTORIA—FINANCE COMPANIES: AMOUNTS FINANCED (a)
(\$m)

Year	Instalment credit for retail sales	Wholesale hire purchase	Other consumer and commercial loans	Factoring	Total
1965-66	147.7	108.1	148.2	40.1	444.1
1966-67	159.7	165.9	163.5	35.8	524.9
1967-68	193.1	190.5	199.5	34.7	617.9
1968-69	224.4	210.7	258.0	30.7	723.9
1969-70	262.3	241.8	(b) 337.0	39.6	880.7

(a) The actual amount of cash provided. It excludes interest, insurance, hiring and other charges, and initial deposits. For purchases of existing agreements and trade debts purchased, it represents the amount of cash paid to the seller.

(b) Other consumer and commercial loans in the year ended 30 June 1970 included \$41.3m personal loans.

VICTORIA—FINANCE COMPANIES: BALANCES OUTSTANDING
(\$m)

At 30 June—	Instalment credit for retail sales	Wholesale hire purchase	Other consumer and commercial loans	Factoring	Total
1966	237.6	17.9	179.8	8.6	443.9
1967	253.7	25.5	202.3	8.2	489.7
1968	292.4	28.0	230.5	9.7	560.6
1969	338.9	34.9	267.7	9.6	651.1
1970	393.6	37.1	336.7	13.5	780.9

**VICTORIA—FINANCE COMPANIES: COLLECTIONS AND OTHER
LIQUIDATIONS OF BALANCES (a)**
(\$m)

Year	Instalment credit for retail sales	Wholesale hire purchase	Other consumer and commercial loans	Factoring	Total
1965-66	187.9	104.4	153.8	46.8	493.0
1966-67	200.5	159.1	174.4	39.5	573.4
1967-68	209.4	189.2	200.6	36.7	635.9
1968-69	241.8	205.8	259.2	34.4	741.2
1969-70	280.0	241.9	328.1	43.0	893.0

(a) Covers cash collections of capital repayments, hiring charges, interest and insurance, and also other liquidations such as bad debts written off and rebates for early payouts.

Instalment credit for retail sales

All types of instalment credit schemes in which repayments are made by regular, predetermined instalments are included in this collection. These include hire purchase, time payment, budget accounts, and personal loan schemes which relate primarily to the financing of retail sales of goods. The statistics do not cover lay-bys, credit accounts not involving regular predetermined instalments, financing of sales of land and buildings, property improvements, services such as repair work and travel facilities, or rental and leasing schemes.

In addition to businesses which finance the retail sale of goods, but do not retail goods themselves (called non-retail finance businesses), information is also collected from retailers who provide their own finance and from retailers' subsidiary companies (called retail businesses). Retailers' subsidiary companies are businesses which have been set up by retailers, or by groups mainly engaged in retailing, primarily for the purpose of financing their retail sales.

Figures for retail subsidiary companies are included with retail businesses in order to permit compilation of figures on a comparable basis over a period of time.

The statistics are classified by type of business according to the nature of the business on whose paper the agreement was written, even if the agreement was subsequently assigned, discounted, or mortgaged with another type of business.

Particulars of total instalment credit transactions of non-retail finance businesses are collected regularly from all such businesses. However, particulars from retail businesses are derived from a sample of these businesses based on the Census of Retail Establishments for 1961-62. Because of this the figures shown below for retail businesses are subject to revision. Revision to data for non-retail finance businesses may also be necessary from time to time as problems are encountered about coverage and classification. All types of goods sold to final purchasers are included, whether producer goods (such as plant and machinery) or consumer goods.

The following table shows the amounts financed by all businesses during the year 1969-70 in Australia, classified by States and by groups of commodities. It also shows the balances outstanding at 30 June 1970 for each State.

AUSTRALIA—INSTALMENT CREDIT FOR RETAIL SALES, 1969-70
(Retail businesses plus non-retail finance businesses)
(\$m)

State	Amount financed (a)				Balances outstanding at 30 June 1970 (e)
	Motor vehicles, tractors, etc. (b)	Plant and machinery (c)	Household and personal goods (d)	Total all goods	
New South Wales (f)	318.6	42.9	157.9	519.4	741.0
Victoria	223.1	25.5	98.4	347.1	474.3
Queensland	115.1	20.8	52.7	188.6	283.3
South Australia (g)	91.4	5.3	30.1	126.9	173.9
Western Australia	93.4	16.6	26.1	136.0	187.4
Tasmania	23.7	4.2	9.6	37.6	54.7
Australia	865.4	115.3	374.8	1,355.5	1,914.7

- (a) Includes amounts financed on both hire purchase and other instalment credit schemes. Amount financed is cash value of goods less deposit, interest, hiring charges, and insurance.
 (b) Includes new and used motor cars, motor cycles, commercial vehicles, tractors, caravans, and motor parts and accessories.
 (c) Includes farm machinery and implements, earthmoving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), etc.
 (d) Includes furniture and furnishings, domestic refrigerators, electrical goods, television and accessories, radios, musical instruments, bicycles, and other household and personal goods.
 (e) Includes hiring charges, interest and insurance.
 (f) Includes Australian Capital Territory.
 (g) Includes Northern Territory.

The following table shows the amounts financed during recent years in Victoria classified according to type of business and groups of commodities financed for the years 1965-66 to 1969-70 :

VICTORIA—INSTALMENT CREDIT FOR RETAIL SALES: AMOUNTS FINANCED BY COMMODITY GROUPS (a)
(\$m)

Year	Motor vehicles, tractors, etc. (b)	Plant and machinery (c)	Household and personal goods (d)	Total all goods
RETAIL BUSINESSES				
1965-66	4.6	1.2	69.9	75.7
1966-67	5.0	0.9	69.3	75.2
1967-68	5.3	0.5	72.2	78.0
1968-69	6.6	0.8	75.9	83.3
1969-70	5.9	0.6	80.4	86.9
NON-RETAIL FINANCE BUSINESSES				
1965-66	130.7	15.1	13.3	159.1
1966-67	131.2	17.1	14.5	162.8
1967-68	158.3	17.5	17.2	193.0
1968-69	182.0	22.5	18.6	223.2
1969-70	217.3	25.0	18.0	260.2
ALL BUSINESSES				
1965-66	135.3	16.3	83.2	234.8
1966-67	136.3	18.0	83.8	238.1
1967-68	163.6	18.0	89.4	271.0
1968-69	188.5	23.3	94.5	306.4
1969-70	223.1	25.5	98.4	347.1

- (a) Includes amounts financed on both hire purchase and other instalment credit schemes. Amount financed is cash value of goods less deposit, interest, hiring charges, and insurance.
 (b) Includes new and used motor cars, motor cycles, commercial vehicles, tractors, caravans, and motor parts and accessories.
 (c) Includes farm machinery and implements, earthmoving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), etc.
 (d) Includes furniture and furnishings, domestic refrigerators, electrical goods, television and accessories, radios, musical instruments, bicycles, and other household and personal goods.

The following table shows the balances outstanding in Victoria classified according to type of business and type of credit at 30 June for the years 1966 to 1970 :

**VICTORIA—INSTALMENT CREDIT FOR RETAIL SALES :
BALANCES OUTSTANDING**

At 30 June—	Outstanding balances			Type of credit			
	Retail businesses	Non-retail businesses	Total	Hire purchase		Other instalment credit	
				Balance outstanding	Percentage of total	Balance outstanding	Percentage of total
	\$m	\$m	\$m	\$m		\$m	
1966	91.4	253.3	344.7	189.2	54.9	155.5	45.1
1967	86.8	254.5	341.3	174.7	51.2	166.7	48.8
1968	82.6	291.2	373.8	173.1	46.3	200.7	53.7
1969	84.8	333.6	418.4	180.6	43.2	237.8	56.8
1970	88.6	385.6	474.3	194.8	41.1	279.5	58.9

Retail hire purchase operation

The following table shows the main features of hire purchase operations in Victoria for the years 1965–66 to 1969–70. It should be noted that these statistics cover hire purchase operations by all businesses.

VICTORIA—RETAIL HIRE PURCHASE OPERATIONS

Class of goods	1965–66	1966–67	1967–68	1968–69	1969–70
NUMBER OF AGREEMENTS MADE					
Motor vehicles, tractors, etc. (a)	58,254	51,685	48,865	47,546	44,701
Plant and machinery (b)	10,540	9,250	8,564	8,633	7,683
Household and personal (c)	294,300	283,290	273,849	276,251	277,347
Total agreements	363,094	344,225	331,278	332,430	329,731
VALUE OF GOODS PURCHASED (d) (\$m)					
Motor vehicles, tractors, etc. (a)	89.9	78.7	83.0	82.8	94.4
Plant and machinery (b)	21.6	23.5	23.4	28.0	30.5
Household and personal (c)	46.2	45.8	48.6	52.5	55.1
Total value	157.6	148.1	155.1	163.3	180.0
AMOUNT FINANCED UNDER AGREEMENTS (e) (\$m)					
Motor vehicles, tractors, etc. (a)	60.0	53.8	56.8	58.9	69.5
Plant and machinery (b)	14.7	16.5	16.4	20.0	22.1
Household and personal (c)	38.7	38.0	39.9	43.1	45.4
Total amount financed	113.3	108.2	113.1	122.0	137.1
BALANCES OUTSTANDING AT END OF YEAR (f) (\$m)					
All classes of goods	189.2	174.7	173.1	180.6	194.8

(a) Includes new and used motor cars, motor cycles, commercial vehicles, tractors, caravans, and motor parts and accessories.

(b) Includes farm machinery and implements, earthmoving equipment, aircraft, industrial plant and machinery, business machines and equipment (including commercial refrigeration equipment), etc.

(c) Includes furniture and furnishings, domestic refrigerators, electrical goods, television and accessories, radios, musical instruments, bicycles, and other household and personal goods.

(d) Value at net cash or list price (excluding hiring charges and insurance).

(e) Excludes hiring charges and insurance.

(f) Includes hiring charges and insurance.

10

TRADE, TRANSPORT, AND COMMUNICATIONS

RETAIL TRADE

Census of Retail Establishments

Statistics of retail sales have been compiled for the years 1947-48, 1948-49, 1952-53, 1956-57, and 1961-62 from returns supplied by all retail establishments in Australia.

In general terms these Censuses have covered the trading activities of establishments which normally sell goods at retail prices to the general public from shops, rooms, kiosks, and yards. Particulars of retail sales obtained from these Censuses are designed principally to cover sales to the final consumer of new and second-hand goods generally used for household and personal purposes. For this reason, sales of building materials, farm and industrial machinery and equipment, earthmoving equipment, etc., have been excluded from the Censuses. For the same reason, and also because of difficulties in obtaining reliable and complete reporting, retail sales of builders' hardware and supplies, business machines and equipment, grain, feed, fertilisers and agricultural supplies, and tractors were excluded from the 1961-62 Census. Retail sales of motor vehicles, parts, etc., are included whether for industrial, commercial, farm, or private use.

A comparison of the results of the 1961-62 Retail Census with those of the 1956-57 Retail Census, which were modified to take into account the changes in scope mentioned above, was last published in the *Victorian Year Book* 1970 on pages 725-31.

Survey of Retail Establishments

During the period between Censuses, estimates of the value of retail sales are made on the basis of returns received from a representative sample of retail establishments. Sample returns are supplied by retail businesses which account for approximately 45 per cent of all retail sales in Australia. Estimated totals are calculated by methods appropriate to a stratified sample.

The following table shows the value of retail sales of goods in Victoria in each of the commodity groups specified for the years 1965-66 to 1969-70:

VICTORIA—VALUE OF RETAIL SALES (a)
(\$m)

Commodity group	1965-66	1966-67	1967-68	1968-69	1969-70
Groceries	302.7	324.4	349.8	375.0	399.0
Butchers' meat	168.7	175.6	187.4	188.0	202.4
Other food (b)	266.7	285.5	301.6	304.4	324.9
Total food and groceries	738.1	785.5	838.8	867.4	926.3
Beer, wine, and spirits (c)	198.6	217.8	240.7	256.4	277.8
Clothing and drapery	316.6	331.7	356.9	366.4	395.0
Footwear	54.8	60.6	63.5	65.5	70.1
Domestic hardware, china, etc. (d)	47.9	51.2	54.8	62.1	68.3
Electrical goods (e)	108.9	111.9	117.1	128.8	136.4
Furniture and floor coverings	87.6	91.8	97.6	104.6	114.2
Chemists' goods	95.8	102.1	109.3	123.7	134.5
Newspapers, books, and stationery	68.2	73.7	78.5	83.0	88.2
Other goods (f)	203.5	215.8	219.9	235.6	258.7
Total (excluding motor vehicles, parts, petrol, etc.)	1,920.0	2,042.1	2,177.1	2,293.5	2,469.5
Motor vehicles, parts, petrol, etc. (g)	657.8	680.2	760.1	795.0	871.8
GRAND TOTAL	2,577.8	2,722.3	2,937.2	3,088.5	3,341.3

(a) Compiled on a basis comparable with the 1961-62 Retail Census.

(b) Includes fresh fruit and vegetables, confectionery, soft drinks, ice cream, cakes, pastry, fish, etc., but excludes some delivered milk and bread.

(c) Excludes sales made by licensed clubs, canteens, etc.

(d) Excludes basic building materials, builders' hardware and supplies.

(e) Includes radios, television and accessories, musical instruments, domestic refrigerators.

(f) Includes tobacco, cigarettes, sporting goods, jewellery, etc.

(g) Excludes tractors, farm machinery and implements, earthmoving equipment, etc.

Retailing in Victoria since 1957, 1969

OVERSEAS AND INTERSTATE TRADE

Overseas trade: legislation and agreements

Of the three components of Victoria's trade, namely, transactions within the State, those with other Australian States, and those with countries outside Australia, the first two are, in practice, free of control or restriction; trade with overseas countries is subject to the customs laws of the Commonwealth Government.

By the Commonwealth of Australia Constitution Act, the power to make laws about trade and commerce with other countries was conferred on the Commonwealth Parliament, and by the same Act, the collection and control of customs and excise duties passed to the Executive Government of the Commonwealth on 1 January 1901.

The first Commonwealth Customs Tariff was introduced by Resolution on 8 October 1901, from which date uniform duties came into effect throughout Australia. The Australian Customs Tariff has been developed in conformity with the policy of protecting economic and efficient Australian industries, and of granting preferential treatment to specified imports from certain Commonwealth countries. Some goods, generally those of a luxury nature, are subject to duty for revenue purposes. Customs collections are a major source of revenue, and the protective character of the tariff has an important influence on the Australian economy.

The present tariff provides for general and preferential rates of duty, and its structure is based on the "Brussels Nomenclature" which has its origins in the Convention on Nomenclature for the Classification of Goods in Customs Tariffs, signed in Brussels on 15 December 1950. Australia has operated a "Brussels-type" tariff since 1 July 1965.

Preferential rates apply to goods the produce or manufacture of the United Kingdom, Ireland, Canada, New Zealand, Papua and New Guinea, and certain goods, the produce or manufacture of specified countries, provided that such goods comply with the laws in force at the time affecting the grant of preference.

General rates apply to goods from all countries which do not qualify for preferential rates of duty under a particular tariff classification.

Primage duty

In addition to duties imposed by the Customs Tariff 1965, *ad valorem* duties at 5 per cent or 10 per cent are charged on some goods according to the type of goods and their origin. Goods produced or manufactured by New Zealand, Norfolk Island, Fiji, Cocos (Keeling) Islands, Christmas Island (Indian Ocean), and the Territory of Papua and New Guinea are exempt from primage duty.

Tariff Board

The Tariff Board is set up under the provisions of the Tariff Board Act to advise the Commonwealth Government on matters relating to the protection and encouragement of Australian industry.

Bilateral trade agreements

Australia has numerous trade agreements with overseas countries, the principal agreements being outlined below :

Country	Main features of agreement
United Kingdom	Dated 1956. Preservation of security for Australian exports in United Kingdom markets. Lowering of obligatory margins of preference which Australia extends to the United Kingdom.
Canada	Dated 1960. Mutual accord of preferential tariff treatment with certain specified exceptions as for 1931 Agreement plus concessions granted in 1932 and 1937.
New Zealand	Dated 1966. Provides for free trade in certain scheduled goods. Provision is made for addition of items to the schedule. The 1933 Agreement continues in force as part of the 1966 Agreement except as superseded or modified by it.
Rhodesia	Dated 1955. Exchange of preferential tariff treatment over a range of items. Since the unilateral declaration of independence by the Rhodesian Government in November 1965, this Trade Agreement has been inoperative.
Malaysia	Dated 1958. Agreement negotiated with the Federation of Malaya and applies only to that part of Malaysia formerly comprising the Federation. Records exchange of preferential treatment with special protection for Australia's wheat and flour markets in Malayan States, and for Malayan rubber and tin in Australia.

Country	Main features of agreement
Indonesia	Dated 1959. Records desirability of expanding trade between Australia and Indonesia. Gives recognition to importance of flour trade from Australia to Indonesia.
Japan	Dated 1963. Mutual exchange of most-favoured-nation treatment. Japan to accord preferential treatment to Australian wool and wheat as well as expanded opportunities for imports into Japan of other Australian primary produce and motor vehicles. Australia to consult Japan on temporary protection cases affecting Japanese products.
Philippines	Dated 1965. Provides for an exchange of non-discriminatory treatment while recognising existing preferences.
South Korea	Dated 1965. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences. Both Governments undertake to endeavour to increase volume of trade with each other.
U.S.S.R.	Dated 1965. Provides for an exchange of non-discriminatory treatment and for consultation on request about any matter affecting the operation of the Agreement.
Poland and Bulgaria	Dated 1966. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences. Both Governments undertake to endeavour to increase volume of trade with each other.
Romania and Hungary	Dated 1967. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences.
Republic of China (Taiwan)	Dated 1968. Provides for an exchange of non-discriminatory treatment with allowances for existing preferences.

General Agreement on Tariffs and Trade (G.A.T.T.)

The General Agreement on Tariffs and Trade, to which Australia was one of the original contracting parties, is an international trade agreement which has been in operation since 1 January 1948. At the end of January 1970, seventy-six countries, whose foreign trade represented over 80 per cent of the total volume of world trade, were full contracting parties to the Agreement, two had acceded provisionally, and thirteen applied the Agreement on a *de facto* basis.

Six series of tariff negotiations have been conducted, as a result of which Australia has obtained tariff concessions on almost all the principal products of which Australia is an actual or potential exporter to the individual countries concerned.

Excise Tariff

The Excise Tariff applies to certain articles which can only be manufactured under licence and subject to certain conditions. The tariff relates to beer, spirits, amylic alcohol and fusel oil, saccharin, liqueurs, flavoured spirituous liquors, tobacco, cigars, cigarettes, snuff, coal, certain petroleum, shale, or coal tar distillates, playing cards, cigarette papers, matches, wine (certain types), and canned fruit.

Customs (Import Licensing) Regulations

Import licensing, introduced at the beginning of the Second World War, was relaxed progressively after the war so that by March 1952 goods from the non-dollar area (except Japan, to which special conditions applied until 1957) were virtually free from import licensing controls. A fall in the price of wool and a large increase in imports in the year 1951-52 so endangered Australia's external financial position that in March 1952 the import restrictions were again intensified. The war-time regulations were subsequently replaced by regulations made under the *Customs Act 1901-1954*.

Between March 1952 and February 1960 import restrictions were varied broadly in line with Australia's balance of trade position.

After the changes made in February 1960 only about 10 per cent of imports remained subject to control. The remaining restrictions were removed in October 1962 for all commodities, with the exception of a small group which were retained under control for reasons of association with the protection of the Australian industries concerned.

Export controls and incentives

The Customs Act makes provision for the prohibition of exportation of certain goods from Australia either absolutely, or to a certain place, or unless prescribed conditions are complied with. The *Banking Act 1959* contains provisions to ensure that the full proceeds of exports are received into the Australian banking system in the currency and in the manner prescribed by the Reserve Bank of Australia.

The Commonwealth Government provides taxation concessions as financial incentives to export. A special income tax allowance, equal and additional to the ordinary allowable deduction in respect of specified expenses, is designed to encourage firms to incur promotion expenditure in advance of export sales. Rebates of pay-roll tax are granted to employers whose export sales have increased above their average annual level in a base period. Rebates are also available to employers who have supplied components embodied in the product exported.

Australian trade missions

During the last decade trade missions have become an integral part of the Commonwealth Department of Trade and Industry's campaign to develop and expand Australia's export trade. They have proved successful in creating an awareness, especially in new markets, of Australia as a producer of quality primary and secondary commodities, in establishing Australia as a source of supply, in establishing a basis for long-term business and in producing valuable export business from "on the spot" trading. Trade missions have been directly responsible for substantial and permanent increases in export earnings.

Trade missions may be of the survey or selling type. The general survey mission is designed to carry out a survey of a particular area, obtain market information, and assess the market potential for Australian products. The specialised survey mission undertakes a market survey on behalf of a particular industry or for specific commodities. A survey mission usually comprises about five members; the Government selects suitable specialists and

meets the full cost of the project. The mission reports back and recommends further appropriate trade promotional activity.

The general selling mission is a planned "hard sell" overseas visit of a group of businessmen whose products have market prospects in the countries to which the mission will travel. Membership is usually about twenty although numbers have been as high as forty and as low as seven members. The specialised selling mission is similar to the general selling mission in relation to the responsibilities of members and the facilities provided by the Government, but differs in that it is concerned with specific industries, is normally smaller, and is sometimes backed up by small displays at selected centres to give additional impact.

As members of a selling mission, businessmen pay their own fares and accommodation and contribute towards the cost of mission entertainment. The Government meets the costs of a leader and manager, determines the itinerary, makes all necessary arrangements in Australia, and through Trade Commissioners in the countries being visited, organises government and business contacts, press receptions, and supporting advertising and publicity for the mission while it is away. A report on the mission's findings and recommendations is published and distributed.

Since 1954 Australia has sent overseas fifty-two trade and survey missions and five trade ships. The areas visited include Africa, South-east Asia, New Zealand, India and Ceylon, North America and Canada, the Pacific Islands, the Middle East and Mediterranean, South America and the Caribbean, and Britain and Northern Europe.

Victoria's pattern of trade, 1964

Overseas trade : recorded value of imports and exports

The recorded value of goods imported is the actual money price paid plus any special deduction or the current domestic value of the goods, whichever is the higher, plus all charges ordinarily payable for placing the goods free on board (f.o.b.) at the port of export. When the invoiced value of the imported goods is in a currency other than Australian, the equivalent value in Australian currency is recorded. The recorded value of exports, if sold before export, is equivalent to the f.o.b. value of the goods. If shipped on consignment, the value recorded is the Australian f.o.b. equivalent of the current price offering for similar goods of Australian origin in the principal markets of the country to which the goods are consigned for sale. With regard to wool shipped on consignment, the f.o.b. equivalent of the current price ruling in Australia approximates sufficiently to the f.o.b. equivalent of the price ultimately received. For information about the law relating to exports, see page 572 of the *Victorian Year Book* 1968.

Overseas trade of Victoria

Statistics of Australia's overseas trade passing through Victorian ports are compiled from documents obtained under the Customs Act and are presented in the following series of tables.

The total values of the overseas trade of Victoria for each of the five years 1965-66 to 1969-70 are set out below. Exports do not include the value of stores shipped at Victorian ports on board overseas ships.

**VICTORIA—OVERSEAS TRADE : RECORDED VALUES OF IMPORTS INTO
AND EXPORTS FROM VICTORIAN PORTS**
(\$'000 f.o.b.)

Year	Imports	Exports			Excess of imports
		Australian produce	Re-exports	Total	
1965-66	1,017,360	753,514	14,549	768,063	249,297
1966-67	1,072,514	785,462	15,725	801,187	271,327
1967-68	1,130,741	661,989	23,766	685,755	444,986
1968-69	1,182,747	688,402	19,177	707,579	475,168
1969-70	1,347,053	883,768	28,828	912,596	434,457

**VALUE OF AUSTRALIAN TRADE, AND PROPORTION
HANDLED AT VICTORIAN PORTS**

Year	Australian trade			Proportion of Australian trade handled at Victorian ports		
	Imports	Exports	Total	Imports	Exports	Total
		\$'000 f.o.b.			per cent	
1965-66	2,939,492	2,720,953	5,660,445	34.6	28.2	31.5
1966-67	3,045,341	3,023,925	6,069,266	35.2	26.5	30.9
1967-68	3,264,473	3,044,675	6,309,148	34.6	22.5	28.8
1968-69	3,468,505	3,374,263	6,842,768	34.1	21.0	27.6
1969-70	3,881,227	4,131,543	8,012,770	34.7	22.1	28.2

Classification of overseas imports and exports

From July 1965 imports have been classified according to the new Australian Import Commodity Classification. This classification is based on the Standard International Trade Classification, Revised (S.I.T.C.), which is closely related to the Brussels Tariff Nomenclature used in the new Australian Customs Tariff. A new Australian Export Commodity Classification based on S.I.T.C. was introduced in July 1966.

VICTORIA—CLASSIFICATION OF OVERSEAS IMPORTS AND EXPORTS
(\$'000 f.o.b.)

Division No.	Description	Imports		Exports	
		1968-69	1969-70	1968-69	1969-70
00	Live animals	639	1,836	533	1,395
01	Meat and meat preparations	322	736	73,477	127,469
02	Dairy products and eggs	2,069	2,672	56,614	68,948
03	Fish and fish preparations	8,202	8,198	4,759	4,248
04	Cereals and cereal preparations	3,310	1,449	47,165	77,443
05	Fruit and vegetables	7,984	8,910	56,299	52,140
06	Sugar and sugar preparations and honey	877	1,214	351	494
07	Coffee, tea, cocoa, spices and manufactures thereof	19,842	21,369	331	1,614
08	Feeding-stuff for animals (except unmilled cereals)	1,018	927	3,447	4,806
09	Miscellaneous preparations chiefly for food	898	1,277	1,405	947
11	Beverages	2,226	2,397	1,304	1,789
12	Tobacco and tobacco manufactures	14,790	15,189	298	470
21	Hides, skins and fur skins, undressed	1,204	1,173	32,524	38,467
22	Oil-seeds, oil nuts and oil kernels	593	697	143	199
23	Crude rubber (including synthetic and reclaimed)	14,309	15,484	212	360

VICTORIA—CLASSIFICATION OF OVERSEAS IMPORTS AND EXPORTS—*continued*
(\$'000 f.o.b.)

Division No.	Description	Imports		Exports	
		1968-69	1969-70	1968-69	1969-70
24	Wood, timber and cork	8,927	9,447	78	95
25	Pulp and waste paper	8,303	10,420	62	27
26	Textile fibres and their waste	20,635	22,750	223,739	244,317
27	Crude fertilisers and crude minerals (except coal, petroleum, and precious stones)	19,251	17,948	246	338
28	Metalliferous ores and metal scrap	369	355	13,767	17,696
29	Crude animal and vegetable materials, n.e.s.	4,773	5,055	4,618	7,387
52	Coal, coke and briquettes	61	70	288	441
33	Petroleum and petroleum products	76,939	73,692	12,085	14,271
34	Petroleum gases and other gaseous hydrocarbons	6	18	(a)	(a)
41	Animal oils and fats	116	110	4,286	11,890
42	Fixed vegetable oils and fats	3,763	4,225	17	11
43	Animal and vegetable oils and fats, processed, and waxes of animal or vegetable origin	713	994	254	501
51	Chemical elements and compounds	31,821	36,631	2,367	3,233
52	Mineral tar and crude chemicals from coal, petroleum and natural gas	1,117	1,590	1	1
53	Dyeing, tanning and colouring materials	8,691	10,562	1,432	1,718
54	Medicinal and pharmaceutical products	10,041	13,249	3,219	4,290
55	Essential oils and perfume materials; toilet, polishing and cleansing preparations	3,625	4,166	1,048	1,069
56	Fertilisers, manufactured	4,082	2,084	71	74
57	Explosives and pyrotechnic products	1,182	3,110	1,784	2,150
58	Plastic materials, regenerated cellulose and artificial resins	43,383	48,939	2,456	2,967
59	Chemical materials and products, n.e.s.	15,873	15,622	12,405	13,643
61	Leather, leather manufactures, n.e.s., and dressed fur skins	3,567	4,334	2,112	2,285
62	Rubber manufactures, n.e.s.	10,403	11,659	2,011	3,888
63	Wood and cork manufactures (except furniture)	4,871	5,598	527	634
64	Paper, paperboard and manufactures thereof	34,173	38,266	1,994	2,113
65	Textile yarn, fabrics, made-up articles and related products	112,477	123,666	5,782	7,682
66	Non-metallic mineral manufactures, n.e.s.	21,064	23,224	3,906	4,907
67	Iron and steel	40,101	36,333	1,648	2,697
68	Non-ferrous metals	8,550	9,508	7,909	23,345
69	Manufactures of metal, n.e.s.	28,287	33,078	11,719	15,519
71	Machinery (except electric)	206,697	232,626	21,035	26,135
72	Electrical machinery, apparatus and appliances	66,603	81,052	6,503	9,650
73	Transport equipment	159,505	212,439	35,180	51,070
81	Sanitary, plumbing, heating and lighting fixtures and fittings	1,962	2,420	380	551
82	Furniture	1,671	1,901	264	267
83	Travel goods, handbags and similar articles	1,388	1,530	22	31
84	Clothing and clothing accessories; articles of knitted or crocheted fabric	10,830	13,184	3,110	3,123
85	Footwear, gaiters, and similar articles and parts therefor	4,234	6,634	105	200
86	Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks	36,502	44,940	6,016	7,601
89	Miscellaneous manufactured articles, n.e.s.	42,002	49,473	3,922	5,279

VICTORIA—CLASSIFICATION OF OVERSEAS IMPORTS AND EXPORTS—*continued*
(\$'000 f.o.b.)

Division No.	Description	Imports		Exports	
		1968-69	1969-70	1968-69	1969-70
9A	Commodities and transactions of merchandise trade, not elsewhere classified	38,949	42,860	(b)16,083	(b)17,512
	Total merchandise	1,175,785	1,339,291	693,312	891,393
9B	Commodities and transactions not included in merchandise trade	6,962	7,762	14,268	21,203
	Total	1,182,747	1,347,053	707,579	912,596

(a) Included in Division 9A.

(b) Includes Division 34.

Trade with countries

The value of trade with overseas countries from 1967-68 to 1969-70 is shown in the following table :

VICTORIA—OVERSEAS IMPORTS AND EXPORTS : COUNTRIES OF
ORIGIN AND CONSIGNMENT
(\$'000 f.o.b.)

Country	Imports			Exports		
	1967-68	1968-69	1969-70	1967-68	1968-69	1969-70
Belgium-Luxembourg	8,937	8,687	9,492	8,247	8,325	8,664
Canada	44,863	46,754	49,865	21,270	24,167	26,548
Ceylon	5,562	5,830	4,177	5,970	4,962	5,653
China (mainland)	7,837	9,550	10,811	13,508	19,609	33,613
China, Republic of (Taiwan)	3,233	4,723	6,429	3,271	5,091	6,849
Czechoslovakia	2,312	2,951	2,730	1,025	1,339	1,563
Finland	5,102	5,293	5,295	319	238	267
France	35,507	28,793	33,482	30,442	37,245	38,097
Germany (Federal Republic)	82,708	89,431	113,450	25,883	26,126	26,281
Greece	1,187	1,285	1,791	2,426	1,475	3,948
Hong Kong	13,706	14,358	19,092	9,876	17,594	21,308
India	11,012	10,054	10,591	13,038	5,584	9,100
Indonesia	7,079	6,697	2,911	5,548	5,259	8,535
Iran	7,494	1,731	1,937	3,224	3,614	5,270
Iraq	8,006	10,526	9,151	786	1,567	779
Italy	28,685	30,519	28,000	24,181	26,285	28,500
Japan	127,027	147,918	177,408	106,944	107,526	141,100
Kuwait	18,627	18,309	19,387	1,274	1,305	1,725
Malaysia	8,645	10,234	10,617	15,367	13,576	13,461
Mexico	1,510	722	1,228	5,937	7,694	5,318
Netherlands	15,300	17,460	22,369	7,673	9,128	15,056
New Zealand	19,960	23,108	26,736	45,068	45,516	58,820
Pakistan	5,277	5,291	6,209	2,511	1,045	8,746
Papua and New Guinea	3,934	5,475	6,307	11,813	11,771	14,118
Philippines	808	735	858	14,294	13,178	13,287
Poland	965	1,049	798	4,223	3,896	5,275
Qatar	2,054	12,556	11,039	154	102	134
Saudi Arabia	11,246	10,594	10,118	5,507	5,010	5,659
Singapore	1,333	2,627	3,008	13,155	16,024	24,538
South Africa	4,993	4,860	5,683	10,674	18,878	30,672
Sweden	18,642	18,504	18,692	2,304	2,076	3,426
Switzerland	15,243	14,443	21,094	880	781	1,309
Thailand	522	642	743	6,255	6,958	7,906

VICTORIA—OVERSEAS IMPORTS AND EXPORTS : COUNTRIES OF
ORIGIN AND CONSIGNMENT—*continued*
(\$'000 f.o.b.)

Country	Imports			Exports		
	1967-68	1968-69	1969-70	1967-68	1968-69	1969-70
Trucial States	10,488	3,509	5,711	370	682	818
United Kingdom	262,230	275,526	304,681	106,908	100,565	120,940
U.S.A.	270,072	267,149	315,965	81,320	83,942	112,906
U.S.S.R.	547	735	1,492	5,710	8,916	16,074
Yugoslavia	279	239	313	6,200	5,981	7,039
Other and unknown	57,809	63,880	67,393	62,200	54,549	79,294
Total	1,130,741	1,182,747	1,347,053	685,755	707,579	912,596

Interstate trade

Statistics of trade between Victoria and other Australian States are incomplete and relate mainly to seaborne trade. Although a substantial quantity of freight is carried by road and rail transport between Victoria and neighbouring States, no details of this traffic are available. A small tonnage of freight is carried interstate by air (see page 743).

Interstate trade by sea

In terms of quantity, the principal cargoes carried interstate by ship to and from Victorian ports are coal and briquettes, petroleum and petroleum products, steel, sugar and sugar preparations, and timber. However, there is also a considerable trade in foodstuffs, motor vehicles, and other manufactured goods, particularly through the Port of Melbourne. Details of the principal commodities in interstate shipments handled by the ports of Melbourne and Geelong during 1970 are shown below. For many commodities comparison with details for previous years is not possible because of changes in classification. In addition, details of exports from the Port of Melbourne are not comparable with those for previous years because of changes in the method of calculating tonnages. Some cargoes are recorded in tons weight, while others are recorded in tons measurement. In the statistics the measurement of 40 cu ft is taken as the equivalent of 1 ton.

Port of Melbourne

Interstate exports during 1970 totalled 1,844,568 tons. The principal commodities were transport equipment (including touring passenger cars), 401,734 tons; petroleum and petroleum products, 386,224 tons; fruit and vegetables, 38,961 tons; paper, paperboard, and manufactures thereof, 33,931 tons; iron and steel, 30,676 tons; and chemical elements and compounds, 14,500 tons.

Interstate imports during the same period totalled 2,494,432 tons, the principal commodities being petroleum and petroleum products, 456,456 tons; sugar and sugar preparations, 248,843 tons; iron and steel, 229,715 tons; paper, paperboard, and manufactures thereof, 215,011 tons; wood, timber, and cork, 206,530 tons; transport equipment (including touring passenger cars), 192,410 tons; crude fertilisers and crude minerals, 145,051 tons; chemical elements, 90,566 tons; and coal, coke, and briquettes, 38,785 tons.

Port of Geelong

Total interstate exports during 1970 amounted to 478,305 tons of which petroleum and petroleum products accounted for 436,202 tons. Total interstate imports amounted to 1,084,603 tons, and consisted mainly of petroleum and petroleum products, 591,768 tons; alumina, 192,658 tons; pig iron and steel, 137,934 tons; and coal, 115,461 tons.

Trade of Victoria with Western Australia and Tasmania

Details of trade between Victoria and other States are available only for trade with Western Australia and trade by sea with Tasmania.

Western Australia

Exports from Victoria to Western Australia are valued in terms of landed cost (i.e., c.i.f. basis) at port of entry. Imports from Western Australia are valued at the f.o.b. equivalent at the port of shipment of the price at which the goods were sold. The small proportion of goods received by rail is valued at the f.o.r. equivalent.

For the year 1969-70 the value of exports from Victoria to Western Australia totalled \$270.1m. Transport equipment (\$51.3m), clothing and clothing accessories (\$27.6m), machinery other than electric machinery (\$27.1m), tobacco and tobacco manufactures (\$14.0m), and rubber manufacturers (\$7.4m) were the main types of commodities included in this total.

Imports from Western Australia during the same period were valued at \$50.4m. Petroleum and petroleum products (\$18.2m), inorganic chemical elements and compounds (\$8.8m), and iron and steel (\$3.2m) were the main types of commodities imported.

Detailed statistics of this trade appear in the publications *External Trade of Western Australia*, 1969-70 and *Interstate Trade of Western Australia*, 1969-70 issued by the Deputy Commonwealth Statistician, Perth.

Tasmania

Details of trade between Victoria and Tasmania are available only for trade by sea. Both exports and imports are valued on an f.o.b. basis.

In 1969-70 exports by sea from Victoria to Tasmania were valued at \$177.5m. Transport equipment (\$24.4m), petroleum products (\$16.7m), and tobacco and tobacco manufactures (\$11.7m) were the main types of commodities. The value of tourists' motor vehicles included in this total was approximately \$23.8m.

Imports from Tasmania during this period amounted to \$148.4m. Preserved vegetables (\$13.9m) and timber (\$13.8m) were the main commodities imported. The value of tourists' motor vehicles included in the total was approximately \$23.3m.

Additional details of trade by sea between Victoria and Tasmania are available from the Deputy Commonwealth Statistician, Hobart.

Customs and excise revenue

The total gross customs duties collected by the Commonwealth in Victoria in each of the three years 1967-68 to 1969-70 was \$107,976,098, \$121,260,549, and \$143,425,169, respectively. Collections include duty received on account of goods transferred to other States for consumption and exclude duty in respect of goods imported into other States but consumed in Victoria.

The principal commodities produced in Victoria on which the Commonwealth imposes excise duty are set out in the table below, together with the gross amount of duty collected on account of each item for each of the three years 1967-68 to 1969-70. As with customs duties, collections include duty levied on goods exported to other States for consumption and exclude duty in respect of goods produced in other States, but consumed in Victoria.

**VICTORIA—GROSS EXCISE DUTY COLLECTED
ON PRINCIPAL COMMODITIES**

Article and unit of quantity		Quantity on which duty was collected			Gross excise duty collected		
		1967-68	1968-69	1969-70	1967-68	1968-69	1969-70
		'000	'000	'000	\$'000	\$'000	\$'000
Spirits (potable)	proof gal	624	600	642	6,164	5,903	6,357
Tobacco	lb	1,770	1,674	1,495	3,967	3,750	3,348
Cigars and cigarettes	lb	19,522	20,275	17,933	81,950	85,329	75,260
Petrol	gal	556,528	616,031	643,179	68,453	75,772	79,111
All other articles (a)		..	..	..	109,065	113,464	115,142
Total		..	..	..	269,599	284,218	279,218

(a) Includes excise duty collected on beer, which is not available for separate publication.

The overseas trade and the gross revenue collected at Victorian ports during the year 1969-70 are shown in the following table:

**VICTORIA—OVERSEAS TRADE AND GROSS REVENUE COLLECTED AT
VICTORIAN PORTS, 1969-70
(\$'000)**

Particulars	Melbourne (a)	Geelong	Portland	Western Port	Total
Overseas trade—					
Imports	1,265,051	63,476	6,334	12,192	1,347,053
Exports	793,889	86,719	31,212	776	912,596
Total	2,058,940	150,195	37,546	12,968	2,259,649
Gross revenue—					
Customs	155,320	1,806	213	..	157,339
Excise	269,004	5,979	4,234	..	279,218
Total	424,324	7,785	4,447	..	436,557

(a) Includes Port of Melbourne, Essendon Airport, and parcels post.

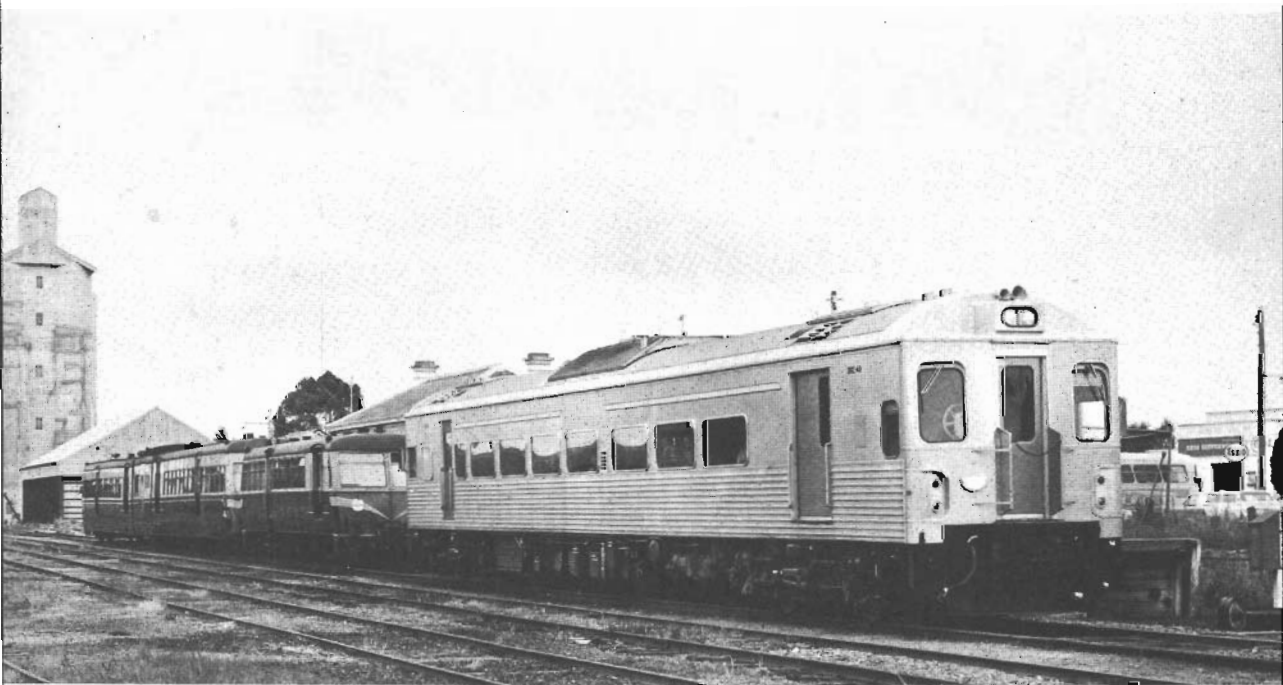
**AUSTRALIA—VALUE OF OVERSEAS TRADE, GROSS CUSTOMS, AND EXCISE
DUTY COLLECTED BY STATES, 1969-70
(\$'000)**

State	Imports	Exports	Excess of exports	Gross duty collected	
				Customs	Excise
New South Wales	1,707,445	1,158,603	—548,842	210,809	359,467
Victoria	1,347,053	912,596	—434,457	157,339	279,218
Queensland	294,114	773,519	479,405	30,437	122,585
South Australia	201,223	417,031	215,808	22,990	80,455
Western Australia	242,299	675,027	432,728	24,649	76,637
Tasmania	46,998	143,470	96,472	3,607	23,835
Northern Territory	39,829	49,725	9,896	2,391	4,103
Australian Capital Territory	2,267	1,571	—696	145	20
Australia	3,881,227	4,131,543	250,316	452,367	946,320

NOTE. Minus (—) sign denotes excess of imports.



An overseas container ship coming into the Swanson Dock at Yarraville.
Melbourne Harbor Trust



A new air-conditioned rail-car meets its predecessor at Willaura, in the western wheat and wool growing area of Victoria.

Victorian Railways



The Bell Street interchange on the Tullamarine Freeway in the City of Broadmeadows.

Country Roads Board

The *City of Melbourne*, the first Boeing 747 Jumbo jet delivered to Qantas, Australia's overseas airline.

Qantas



TRANSPORT

Shipping*Coastal trade*

In the post-war years, particularly since 1959, significant changes have taken place in the carriage of goods by sea around the Australian coast. The Port of Melbourne, the principal sea terminal for Victoria, which is the centre of the coastal trade routes around the mainland coast and to Tasmania, has been experimenting with new methods of cargo handling and "packaging" and the introduction of new specialised ships. In the years following the Second World War Australian shipowners revised their trading practices in the face of vigorous competition from the land-based transport operators. As a result the entire coastal trade by sea was transformed, and ships modified to make them more useful as a means of transportation around the coast.

One of the results of this was the expansion of the bulk cargo trade in which more goods (such as sugar and a variety of oils and oil products) began to be carried in bulk. Later, single bags, boxes, and packages began to be packed into unit loads and containers which facilitated handling on ship and shore by means of new and improved mechanical cargo handling equipment. These new methods led to the specialised ship, exclusively designed and equipped to meet the requirements of the particular trade. These were the roll-on roll-off stern loading ships for cargo packed on road vehicles which travelled in the vessel, and the container ship designed for containerised cargo and other unit loads. The first roll-on roll-off ship in Australia was introduced in 1959 between Melbourne and Devonport in northern Tasmania.

Australia's first specially designed container ship came into service between Melbourne and Launceston in 1961, and was followed in 1964 by a larger container ship for the Melbourne-Fremantle trade. By then, between 7,000 and 8,000 containers were in transit between all States on these ships as well as on conventional and specially modified ships. These new methods are now well established and are being extended to the ports of Sydney and Brisbane.

Efforts are continuing to improve the handling and carrying of general cargo in addition to bulk cargoes which are most suitably carried by sea. More specialised and larger ships in the bulk trades are also proving valuable.

New packaging and cargo handling methods, as well as new ships, are bringing changes to port facilities, where specially designed wharves, equipment, and port modifications are matching the new concepts in ship and cargo handling around the Australian coast. These new concepts are also being extended to Australia's overseas trade.

Searoad service between Victoria and Tasmania

The following table gives details of the searoad service operated by the Australian Coastal Shipping Commission between Victoria and Tasmania :

VICTORIA—TASMANIA : SEAROAD SERVICE (a), 1969-70

Name of vessel	Passengers	Accompanied vehicles	Trade vehicles (b)	Mail vans
<i>Princess of Tasmania</i>	75,224	19,236	3,352	302
<i>Australian Trader</i>	36,475	13,057	2,601	308
<i>Bass Trader</i>	447	87	2,732	284
Total	112,146	32,380	8,685	894

(a) Excludes commercial cargo which consists of unit loads, i.e., containers, trailers, timber packs, etc., as well as commercial vehicles.

(b) Motor vehicles available for sale.

Vessels entered and cleared

The number of vessels entering Victorian ports, the number cleared from those ports, and their total tonnage in each of the five years 1965-66 to 1969-70 were as follows:

VICTORIA—OVERSEAS AND INTERSTATE SHIPPING

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Entrances					
number	3,753	3,706	3,550	3,618	3,696
'000 net tons	16,380	17,439	17,161	17,944	20,516
Clearances					
number	3,754	3,710	3,548	3,591	3,682
'000 net tons	16,384	17,427	17,142	17,769	20,458

Nationality of shipping

The countries of registration of vessels which entered or were cleared at Victorian ports during the years 1968-69 and 1969-70 were as follows:

VICTORIA—NATIONALITY OF SHIPPING

('000 net tons)

Vessels registered at ports in—	Vessels entered		Vessels cleared	
	1968-69	1969-70	1968-69	1969-70
Australia	3,303	4,766	3,272	4,728
Bahamas	50	8	50	8
Denmark	396	169	388	164
France	239	444	239	441
Germany, Federal Republic of	484	710	482	721
Greece	540	752	540	753
Hong Kong	162	104	160	109
India	178	168	178	166
Israel	49	80	46	79
Italy	622	567	624	567
Japan	985	1,024	979	998
Liberia	1,770	1,844	1,752	1,829
Netherlands	784	919	772	886
Antilles (Netherlands)	180	499	180	525
New Zealand	164	159	161	158
Norway	1,461	1,545	1,414	1,589
Panama	170	324	170	318
Singapore	49	45	49	41
Sweden	652	587	633	593
United Kingdom	5,261	5,061	5,233	5,042
United States of America	183	196	188	203
U.S.S.R.	77	119	77	119
Yugoslavia	18	70	18	64
Other	167	356	164	357
Total	17,944	20,516	17,769	20,458

Shipping entered at Victorian ports

Particulars of shipping which entered each principal port of Victoria are given in the following table for the years 1968-69 and 1969-70:

VICTORIA—VESSELS ENTERED AT EACH PORT

Class of vessel	Melbourne		Geelong		Portland		Western Port	
	1968-69	1969-70	1968-69	1969-70	1968-69	1969-70	1968-69	1969-70
NUMBER								
Overseas—								
Direct	291	251	93	112	20	26	40	30
Other	1,475	1,650	225	249	69	88	8	28
Interstate	1,158	953	146	156	18	32	71	118
Total	2,924	2,854	464	517	107	146	119	176
'000 NET TONS								
Overseas—								
Direct	1,366	985	1,629	813	151	210	615	373
Other	9,026	10,399	1,481	2,994	326	408	73	476
Interstate	2,179	2,330	668	782	113	180	293	553
Total	12,571	13,714	3,778	4,588	590	799	981	1,402

Cargoes discharged and shipped

The following tables show the tonnage of overseas and interstate cargoes discharged and shipped in Victorian ports during 1968-69 and 1969-70, as well as the tonnage of overseas cargoes discharged and shipped during the years 1967-68 to 1969-70 according to the countries of origin and consignment, and the nationalities of the vessels in which the cargoes were carried :

VICTORIA—CARGOES DISCHARGED AND SHIPPED AT EACH PORT
(‘000 tons)

Particulars	Melbourne		Geelong		Portland		Western Port	
	1968-69	1969-70	1968-69	1969-70	1968-69	1969-70	1968-69	1969-70
DISCHARGED								
Interstate—								
Weight	1,740	1,516	867	1,096	166	100	94	75
Measure	762	910	..	..	..	..	33	19
Overseas—								
Weight	3,662	3,514	3,597	3,812	139	162	1,326	902
Measure	1,954	2,074	16	11	..	..	..	..
SHIPPED								
Interstate—								
Weight	505	655	634	560	1	3	523	920
Measure	867	1,019	5	..	..	..	1	2
Overseas—								
Weight	1,065	1,379	843	1,758	92	230	56	36
Measure	635	811	20	23	7	5	..	..

NOTE. 1 ton measurement = 40 cu ft.

**VICTORIA—OVERSEAS CARGOES DISCHARGED AND SHIPPED ACCORDING
TO GEOGRAPHIC TRADE AREAS**

(tons)

Geographic trade area of origin or consignment	1967-68		1968-69		1969-70	
	Discharged	Shipped	Discharged	Shipped	Discharged	Shipped
North America and Hawaiian Islands—						
Weight	727,317	151,793	736,092	140,947	566,877	172,564
Measure	336,956	63,374	383,146	55,771	362,581	57,660
South America—						
Weight	10,586	11,046	11,217	9,076	3,934	12,338
Measure	337	3,576	151	2,342	825	2,816
Europe (incl. U.S.S.R.)—						
Weight	211,929	251,464	270,393	284,544	192,877	466,855
Measure	705,819	283,449	801,840	259,046	887,245	290,750
Africa—						
Weight	51,736	32,343	72,507	38,794	76,960	135,212
Measure	28,666	22,686	21,726	42,510	26,333	55,148
Asia—						
Weight	6,712,408	1,251,677	6,676,465	1,299,814	6,759,155	2,251,062
Measure	530,064	151,254	631,275	160,102	671,747	241,292
Papua and New Guinea, New Zealand, and Pacific Islands—						
Weight	452,235	337,910	698,803	277,952	579,407	360,425
Measure	133,568	147,175	131,352	142,799	136,337	189,587
Indian Ocean Islands and Antarctic Area—						
Weight	308,219	1,079	258,138	5,556	210,886	3,580
Measure	..	1,236	..	65	443	1,695
Total Weight	8,474,430	2,037,312	8,723,615	2,056,683	8,390,096	3,402,036
Measure	1,735,410	672,750	1,969,490	662,635	2,085,511	838,948

NOTE. 1 ton measurement = 40 cu ft.

**VICTORIA—OVERSEAS CARGOES DISCHARGED AND SHIPPED ACCORDING
TO NATIONALITIES OF VESSELS**

('000 tons)

Vessels registered at ports in—	1967-68		1968-69		1969-70	
	Discharged	Shipped	Discharged	Shipped	Discharged	Shipped
Australia	9	..	14	..	94	62
Bermuda	..	..	..	..	96	37
Denmark	339	72	361	34	100	39
France	224	12	290	14	565	40
Germany, Federal Republic of	379	72	335	64	441	87
Greece	419	161	325	101	359	336
Hong Kong	67	52	121	69	42	107
India	43	19	52	27	130	82
Italy	71	7	18	6	42	36
Japan	500	173	826	146	818	288
Liberia	2,017	200	1,983	169	1,985	271
Netherlands	345	166	199	171	239	504
Antilles (Netherlands)	132	..	229	..	637	10
New Zealand	121	92	121	92	129	143
Norway	1,869	260	1,721	427	1,112	336
Panama	78	46	89	36	193	80
Sweden	386	235	276	171	234	229
United Kingdom	2,998	1,012	3,526	995	2,888	1,278
United States of America	63	38	58	38	129	41
U.S.S.R.	..	4	6	11	50	41
Other	150	89	143	148	193	194
Total	10,210	2,710	10,693	2,719	10,476	4,241

NOTE. In the above table tons measurement has been added to tons weight.

Port Phillip Sea Pilots

Thirty-six former shipmasters are licensed by the Marine Board of Victoria to perform all pilotage duty within Port Phillip Bay. One is in charge of the Williamstown office as Secretary-Treasurer; the others, in turn, take a week in command of the pilot steamer cruising off Point Lonsdale to put pilots aboard incoming ships or take them off departing vessels.

Thirty-four pilots are rostered for the various pilotage duties: from the Heads to Port Melbourne, Williamstown, Geelong, and Western Port; between Geelong and Melbourne; in the Yarra River or Victoria Dock; or elsewhere as required. Pilots for inward ships are organised by the pilot-in-charge of the steamer; those for departing ships and ships berthing by the Williamstown office staff.

The following table shows the number of ships (sailing inwards and outwards) piloted through Port Phillip Heads during the years 1959 to 1970:

VICTORIA—NUMBER OF SHIPS PILOTED THROUGH
PORT PHILLIP HEADS

Year	Number of ships	Year	Number of ships	Year	Number of ships
1959	3,593	1963	4,333	1967	4,606
1960	3,768	1964	4,505	1968	4,614
1961	4,288	1965	4,738	1969	4,388
1962	4,177	1966	4,759	1970	4,433

Further reference, 1963 to 1971

Melbourne Harbor Trust

Administration

The Melbourne Harbor Trust Commissioners are a financially independent, corporate body operating under the provisions of the *Melbourne Harbor Trust Act 1876*, and subsequent amendments and variations. The land and waters of the 10½ square mile port area are vested in the six commissioners who are appointed by the Governor in Council. They comprise a full-time chairman who also is virtually the port's managing director, and five part-time commissioners who, in accordance with the Act must be associated with various port activities, i.e., shipping, primary production, imports, exports, and labour.

The Melbourne Harbor Trust Commissioners are both the port authority and the conservancy authority of the Port of Melbourne. The Trust maintains, improves, and develops the port, and is empowered under its Act to make regulations for the management and financing of the port subject to the approval of the Governor in Council.

Finance

The Port of Melbourne is self-supporting and does not receive any financial grants from the State Government. The Trust's revenue is derived from a number of charges paid by the users of the port. The charges are principally wharfage rates levied on each ton of cargo landed in, or shipped out of the port, and tonnage rates levied on the gross registered tonnage of ships and the time they spend in port. Other charges cover rent of sheds, hire of port owned cargo handling equipment, general port services, and rental of land reserved for essential long term port development. Expenditure is on

port maintenance, reconstruction, modernisation, and development, with any surplus put back into port development. In 1970 the Trust had approximately \$96m invested in port assets. Capital works are financed out of revenue and out of loans, which are mainly privately arranged and are raised and financed by the Trust itself and guaranteed by the Trust's income from wharfage and tonnage. The Trust is required to pay into the Consolidated Fund of the State Government approximately one fifth of its revenue from wharfage and tonnage.

The following table shows particulars of the financial operations of the Melbourne Harbor Trust for the years 1966 to 1970:

VICTORIA—MELBOURNE HARBOR TRUST : REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1966	1967	1968	1969	1970
REVENUE					
Wharfage and tonnage rates	6,393	6,692	8,357	8,901	9,475
Rent of sheds	572	586	638	576	458
Special berth charges	317	381	489	461	402
Rent of lands	949	965	1,154	1,665	1,951
Crane fees	1,672	1,793	2,043	1,937	1,963
Other	792	796	892	781	798
Total revenue	10,695	11,213	13,573	14,321	15,047
EXPENDITURE AND APPROPRIATIONS					
Administration and general expenses	874	908	1,098	1,590	1,331
Port operating expenses	2,422	2,642	2,821	3,074	3,304
Maintenance—					
Dredging	265	203	266	315	826
Harbour	110	116	101	117	156
Wharves	638	581	593	691	687
Approaches	125	152	119	133	139
Railways	79	80	80	53	59
Cargo handling equipment	342	358	371	362	369
Other properties	93	54	55	62	83
Interest	1,551	1,706	1,780	1,927	2,032
Depreciation and renewals	1,584	1,427	2,295	2,536	2,799
Insurance	99	103	108	113	120
Sinking fund	160	435	600	200	800
General reserve	900	1,037	1,600	1,400	500
Payments to Consolidated Revenue	1,287	1,346	1,468	1,506	1,559
Other	2	2	(a)	(a)	36
Total expenditure and appropriations	10,530	11,150	13,355	14,079	14,800
CAPITAL OUTLAY					
Land and property	106	201	291	56	107
Reclamation	312	408	359	80	199
Deepening waterways	1,239	1,235	2,517	3,238	1,061
Wharves and sheds construction	1,760	2,095	3,214	2,548	2,472
Cargo handling equipment	1,252	91	537	395	527
Approaches construction	303	355	412	587	695
Floating plant	95	51	167	731	18
Other works, etc.	675	769	588	674	1,014
Total capital outlay	5,742	5,205	8,085	8,309	6,093
Loan indebtedness at 31 December	32,247	34,484	36,029	37,889	40,690

(a) Under \$500.

Advent of new cargo pattern

Container and unit-load methods of cargo handling in the Port of Melbourne have been introduced and extended during the 1960s. By 1970

the cumulative effect of gradually developing these new facilities had a significant impact on the port as a whole and the emphasis of cargo handling activities in the port had shifted from the long established conventional cargo handling areas to five principal areas catering for container and unit-load ships and cargo handling methods.

In 1970 the port handled a volume of 14.2 million tons of import, export, and transshipment cargo, an increase of 7.6 per cent over 1969. This volume was handled by coastal and overseas shipping which paid 2,992 calls at the port, an increase of about 1.5 per cent.

The changes in the character of the port began to be really noticeable with the arrival, in March 1969, of the first overseas container ship on the United Kingdom—Australia service.

Cargoes flowing through all ports of the world are classed as either "dry or wet" bulk—such as oil carried in tankers or sugar carried loose in the hold of a bulk carrier—or "general" which includes the variety of goods usually crated, boxed, or carried in some other individual packaging. Container ships carry this "general" cargo in containers of various international standard sizes.

Unit-load multi-purpose vessels, which first began to operate out of Melbourne in the overseas service in 1966 and in the coastal trade some eight years earlier, are vessels specially designed to carry containers and unit-loads, which are a collection of general cargo assembled into one load, usually on a tray or pallet. These ships can also carry conventional cargo, namely, individual items of general cargo handled and loaded separately, and handled individually inside the ship and on shore.

By the end of 1970 the total cargo volume of 14.2 million tons comprised 9.1 million tons of general cargo and 5.0 million tons of bulk and 30.2 per cent of the total general cargo was containerised.

Further references, 1961-1971; Changing trends in port development, 1968; Port facilities, 1969; Port emergency service, 1970; Advent of new cargo pattern, 1971

Geelong Harbor Trust

The Port of Geelong is under the control of the Geelong Harbor Trust which was constituted under an Act of 1905. The Trust consists of three commissioners appointed by the Governor in Council.

Entrance to the port is by 15 miles of channel dredged to a depth of 36 ft and a width of 400 ft.

There are nineteen effective berths in the port and two berths at the Commonwealth Explosives Pier, Point Wilson—owned and operated by the Commonwealth. Maximum water depths are 36 ft at eight berths, 32 ft at ten berths (all within the inner harbour), and three outer harbour berths of 30 ft. Special berths are provided for the handling of coal, grain, phosphatic rock and sulphur, oil, and alumina. The bulk grain terminal has a 30 million bushel storage capacity, and is capable of loading ships at the rate of 1,600 tons an hour.

Refinery Pier can accommodate simultaneously four oil tankers with maximum drafts of 34 ft. The Harbor Trust cool stores have a storage capacity of 900,000 cu ft. Adequate open coal storage is available. The port has good clearance facilities, with direct rail loading at seven berths and road clearance at all berths.

The new dry bulk berth (renamed Lascelles Wharf) came into operation early in 1970 and this together with the No. 2 berth (formerly Kings Wharf) provides 1,140 ft of modern wharf facilities for discharge of phosphatic rock and other fertiliser components.

A stern loading ramp with associated storage facilities was constructed at Corio Quay South No. 1 and came into operation in January 1971.

The Harbor Trust has floating plant which includes six tugs, six barges, and one diesel-powered floating crane.

VICTORIA—GEELONG HARBOR TRUST: REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1966	1967	1968	1969	1970
REVENUE					
Wharfage, tonnage, and special berth rates	2,373	2,464	2,428	2,536	2,937
Shipping services	838	851	801	756	909
Rents, fees, and licences	45	47	51	49	82
Freezing works and abattoirs	64	64	80	100	104
Other	120	53	5	10	22
Total revenue	3,440	3,479	3,365	3,451	4,054
EXPENDITURE AND APPROPRIATIONS					
Management expenses	366	382	432	466	517
Shipping services	647	614	670	687	775
Maintenance—					
Wharves and approaches	102	89	91	79	111
Harbour	71	81	99	109	118
Floating plant	13	16	18	22	19
Other	17	26	25	20	24
Interest on loans	401	400	413	422	388
Sinking fund	76	77	79	81	80
Depreciation provision	515	603	693	737	740
Port development fund	1,007	500	250	700	500
Other	62	66	68	75	85
Total expenditure and appropriations	3,277	2,854	2,838	3,398	3,357
CAPITAL OUTLAY (NET)					
Floating plant	..	651	131	19	9
Land and property	70	138	77	210	101
Deepening waterways	69	1,942	313	8	..
Wharves and approaches	431	553	709	718	788
Other	11	36	46	34	11
Total capital outlay	581	3,320	1,276	989	909
LOAN INDEBTEDNESS AT 31 DECEMBER					
State Government	124	118	118	87	81
Public	7,404	7,618	7,815	8,007	6,982
Total loan indebtedness	7,528	7,736	7,933	8,094	7,063

Portland Harbor Trust

Situated on the south-west coast of Victoria, the Port of Portland is administered by a board of three commissioners and serves an area of some 40,000 square miles of western Victoria and the south-east of South Australia. The port is within a few miles of main shipping routes with deep water approaches right to the entrance of the harbour basin.

Completion of extensions to the Trust's bulk seaboard grain terminal during 1969 provided storage for the handling of all types of coarse

grains with a resulting increase in the tonnage of this type of traffic, while the erection of a 4 million bushel horizontal wheat store by the Victorian Grain Elevators Board during the latter part of 1970 has further strengthened the port to service overseas markets with grain drawn from its hinterland.

The handling of a diversified range of grains during the year has justified previous forecasts made by the commissioners that the volume of grain available for export through Portland would increase with the provision of additional storage space.

The volume of exports handled during the year received an additional boost with the inauguration of shipments of bagged wheat and flour to the Middle East, and the formation of the Portland Export Company Pty Ltd, which handled several shipments of district produce to Papua-New Guinea and Pacific markets.

For the first time on record, total trade exceeded the half million ton mark in 1969-70. Compared with the previous year's figures, the volume

VICTORIA—PORTLAND HARBOR TRUST : REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
REVENUE					
Wharfage rates	137	156	159	224	246
Tonnage rates	21	26	23	26	37
Shipping services	63	108	101	139	192
State Government grant	576	615	760	616	650
Grain terminal	82	207	17	144	341
Other	46	57	86	83	67
Total revenue	925	1,169	1,146	1,232	1,533
EXPENDITURE AND APPROPRIATIONS					
Administration	68	76	92	103	118
Maintenance	78	66	70	96	86
Shipping services	61	88	77	98	158
Depreciation	26	27	27	27	34
Interest on loans	677	739	807	846	911
Sinking fund	50	52	53	53	51
Loan redemption	33	36	43	49	60
Grain terminal (excl. depreciation)	35	73	35	61	104
Other	4	2	2	6	5
Total expenditure and appropriations	1,032	1,159	1,206	1,339	1,527
CAPITAL OUTLAY					
Port rail system	..	49	66	89	7
Reclamation	315	114	59	51	17
Grain terminal	111	131	79	226	664
Deepening waterways	51	51	26	52	28
Wharves and sheds	386	395	388	41	20
Breakwater construction	..	42	..	37	15
Floating plant	..	..	..	423	152
Other	185	196	278	180	112
Total	1,048	978	896	1,099	1,015
Loan indebtedness at 30 June—					
State Government	4,083	4,083	3,673	3,673	3,673
Public	13,027	13,939	14,826	15,610	16,492
Total loan indebtedness	17,110	18,022	18,499	19,283	20,165

of cargo handled rose by 28.6 per cent to total 608,953 tons. Shipping revenue showed a corresponding increase of almost 18 per cent.

The gross register of vessels berthed amounted to 1,344,598 tons. This included 34 ships berthed for bunkers and other purposes, but excludes a further 23 vessels that made use of the port anchorage.

In order to keep pace with the growing demands of port traffic, the Harbor Trust has completed the construction of a new transit shed on No. 1 berth and has finalised plans to erect a 100,000 cu ft capacity cold store on No. 2 Quay for the storage of pre-shipment cargo requiring refrigeration.

Western Port

Western Port is an extensive inlet eastward of and adjacent to Port Phillip, and is separated from it by the Mornington Peninsula which is about 10 miles wide. The Port is sheltered from Bass Strait by Phillip Island at its southerly end and the waters between the western side of this island and the mainland form the entrance to the Port. It is approximately 26 miles from the entrance to the northern extremity of the inlet.

Although the entrance contains some large sandbanks, a deep water channel up to 102 ft deep runs close to the island. This navigable channel extending from the Western Entrance to Crib Point is 13 miles long with low-water depths of 47 ft and 49 ft, respectively, in the Northern and Western Arms. Tidal rises are of the order of 9 ft springs and 7 ft neaps.

Pilotage for the port is undertaken by the Port Phillip Sea Pilots. Large tankers inward bound from the west generally take their pilot aboard at the Pilot Boarding Station off Port Phillip Heads; tankers from the east take their pilot aboard at Flinders, where a 36 ft pilot launch is provided.

Harbour services comprise two 1,500 hp firefighting tugs each with a bollard pull of some 23 tons as well as mooring launches. The channels are marked by 34 gas buoys and the whole of the harbour services are co-ordinated from the Harbor Master's office at Stony Point.

For many years Western Port remained unexploited except for its use by a commercial fishing fleet and amateur fishing and boating enthusiasts. In June 1963 the Westernport (Oil Refinery) Act was passed by the Victorian Government giving effect to an agreement between the State and B.P. Refinery (Westernport) Pty Ltd to establish a refinery and associated port facilities. The marine terminal established provides two berthing heads, one capable of taking tankers up to 100,000 tons deadweight and the other tankers up to 40,000 tons.

Large scale development of offshore oil and natural gas reserves in nearby Bass Strait led to the Westernport Development Act being passed in December 1967. This Act gives effect to an agreement between the State and Hematite Petroleum Pty Ltd and Esso Exploration and Production Inc. to construct a fractionation plant to process the gas liquids (LPG) and a single berth marine terminal, which is located at Long Island Point, designed to accommodate tankers up to 100,000 tons deadweight. The terminal was completed in 1969. Dredging to give 47 ft in channel and swinging circle and 52 ft alongside was completed in 1970.

The erection of a plant for Cresco Fertilizers Ltd added to the recent development of the area and continued growth is likely following the

joint announcements in 1969 by B.H.P. and Guest, Keen and Nettlefolds. Their decision to develop progressively a rolling mills and major steel works complex on the western shores will require large capital investment and a large labour force.

Western Port is well located in relation to the State's major electric power grid. Port maintenance facilities have been established at Stony Point and other services such as transport, water supply, and sewerage can be progressively developed.

Further references, 1961-1971 ; Lighthouses, 1964 ; Principal ports of Victoria, 1965

Railways

Geographical factors

The Victorian transport system is centred on Melbourne, the capital of the State. The existence of considerable gaps in the Great Dividing Range has allowed the railway system to fan out to the main agricultural and pastoral areas.

The line to the north-east and Sydney passes through the Kilmore gap ; through the Woodend gap goes the northern line to Bendigo and beyond ; the Geelong line crosses the basalt plains to the south-west ; and to the east, the Gippsland valley (between the Dividing Range and the Strzelecki Ranges) provides a convenient path for the electrified main line handling the vast brown coal resources of the La Trobe Valley.

In the north-western part of the State, the Mallee region, the railway has stimulated development of what was previously regarded as arid, worthless land into prosperous farm lands. It also links Melbourne with Mildura, centre of the dried fruit industry.

Historical development

The first proposed railway for Victoria dates back to March 1839, when Robert Hoddle, Government Surveyor at Port Phillip, marked out a town site at the Beach (Port Melbourne) and planned a line from Melbourne. Seven years later, Geelong residents proposed the construction of a 200 mile line from Geelong to the vicinity of Portland and Hamilton in the Western District. In 1852-53 private railway companies were formed in Victoria and given government approval to build lines.

Australia's first steam railway began operating between Flinders Street and Sandridge (now Port Melbourne) on 12 September 1854 and was opened by The Melbourne and Hobson's Bay Railway Company for public traffic the following day. The first Victorian country railway, Geelong to Greenwich Pier (Newport), was opened on 25 June 1857, and private companies' lines were built from Melbourne to Windsor, Brighton Beach, and Hawthorn between 1859 and 1861.

In 1862 government lines were opened to Ballarat and Bendigo, and two years later, from Bendigo to Echuca. (The Geelong-Melbourne railway had been purchased by the Government in 1860.)

In less than a decade, Victoria saw fulfilled the promise of building the main trunk railways. Through the 1870s construction proceeded to the south-west from Geelong and to the south-east from Melbourne. In 1870 contracts were let for building the line from Essendon to Wodonga. The north-eastern railway, opened in sections, reached Wodonga in 1873.

Nearly ten years elapsed before junction was made with the New South Wales system at Albury on 14 June 1883. This was the beginning of the break of gauge, which continued to disrupt New South Wales-Victoria traffic until 79 years later, when the standard gauge track between Melbourne and Albury was opened for traffic in 1962.

Administration and functions

The Victorian Railways Department was established on 19 March 1856. It is administered by a board of three commissioners, appointed by and responsible to the Government through the Minister of Transport. Each commissioner gives special attention to particular branches of railway operation. They are also responsible for a number of sections of railway constructed in New South Wales under the Border Railways Agreement. The lines in the Riverina district are extensions of Victorian lines.

Main locations of tracks

The main interstate lines are the north-east to Sydney, comprising both broad (5 ft 3 in) and standard (4 ft 8½ in) gauge tracks to the border city of Albury (190½ miles), and the north-western broad gauge line linking Melbourne with Adelaide. The Victorian terminal station on this line is Serviceton (287 miles). The north-east line branches at Mangalore to serve the Goulburn Valley. The north-western line branches at Ballarat (74 miles) to Maryborough (112 miles), thence to Mildura (351 miles, the State's longest country main line), and at Ararat to Portland, the Western District's new port (250½ miles).

The Gippsland line is electrified as far as Traralgon (97½ miles), and thence is diesel operated to Bairnsdale (171 miles). The goods service, also diesel operated, is continued through to Orbost (231 miles). Lines branch from Dandenong to Nyora and from there to Wonthaggi (86 miles) and Yarram (136 miles) in South Gippsland.

Other main lines are Melbourne-Bendigo (101 miles, known as the "main line") from where lines branch further north; and Melbourne-Geelong (45 miles), continuing to Warrnambool (166 miles) and to Port Fairy (186½ miles).

Main types of rolling stock and services

Diesel-electric locomotives, the S class and X class (1,800-2,200 hp) and B class (1,600 hp), haul Victorian Railways fast passenger and freight trains. The T class (950-1,050 hp) diesel-electric locomotive is mainly a freight train operator, but it also hauls selected passenger trains. The Y class (650-750 hp) diesel-electric locomotive hauls branch line freight trains and is also used on freight yard work. The W class (650 hp) diesel-hydraulic locomotive and the F class (350 hp) diesel-electric are almost exclusively used on shunting and transfer work. In addition, five H class (1,050 hp) hump shunting diesel-electric locomotives have been brought into service. The L class (2,400 hp) electric locomotive hauls passenger and freight trains on the Gippsland line, Victoria's longest electrified track. Country passenger train services are supplemented by 102 hp, 153 hp, and 280 hp diesel, and 260 hp diesel-electric rail-cars.

Modern multiple-unit saloon type suburban electric trains are progressively replacing obsolete swing-door compartment type trains on the

suburban electric service. Most carriages on interstate and many on mainline country trains are of steel construction and air-conditioned, but a number of excursion and corridor compartment-type, non air-conditioned carriages of wooden construction are also used for country passenger traffic.

Freight wagons are of the fixed wheel or bogie types. They include many types of wagons and vans, up to 57 ton capacity, and a wide variety of specially designed wagons to carry loads ranging up to 170 tons.

New metropolitan trains

The first of Melbourne's new fluted stainless steel trains are expected to enter service in 1972. Based on a Japanese design, the trains will be built in Australia at a cost of \$30m. The new trains incorporate many of the latest developments in urban transport including heating, ventilation, tinted windows, improved seating, better braking, ride, and acceleration, and self locking doors. The trains are less prone to vandalism and will be easier and cheaper to maintain.

Although only six carriages will be used on the new trains (compared with seven or eight in the Harris trains) 1,500 passengers per train can be carried in peak hour—200 more than in the Harris trains.

The cost of the trains is being met by normal railway loan allocations with provision in the purchasing programme for delivery of more than the required five trains per year should more money become available.

Melbourne yard modernisation

Victorian Railways new Melbourne Yard and Freight Terminal was commissioned in December 1970. Built at a cost of \$14m and working around the clock, the yard is capable of handling up to 5,000 wagons a day compared with 2,500 under the old system. It is returning 10 per cent on capital invested.

It incorporates Australia's first automated hump shunting and was built on the site of an outdated gravitation yard that had existed since the early 1900s. With the new yard working smoothly, inward freight received overnight is in unloading areas early in the morning. Freight loaded out of Melbourne or passing through the yard is dispatched on the first available train.

The terminal was rebuilt from 1964 to 1970 and during the period traffic was kept moving without delays.

Suburban tracks

Victoria's first section of 5 ft 3 inch gauge suburban line, from Flinders Street Station to Sandridge (now Port Melbourne), was completed in 1854 for Australia's first train. Construction of other lines was as follows: Flinders Street to St Kilda (1857); Footscray to Williamstown (1859); Princes Bridge to Hawthorn, Richmond to Brighton Beach (1859 to 1861); Melbourne to Essendon (1860); Essendon to Broadmeadows (1872); South Yarra to Dandenong (1877 to 1879); Caulfield to Frankston (1881-82); Hawthorn to Lilydale (1882); Brighton Beach to Sandringham (1887); North Melbourne to Somerton (1884 to 1889); Collingwood to Heidelberg (1888); Ringwood to Upper Ferntree Gully, Clifton Hill to Preston (1889); Burnley to Darling and Camberwell to Ashburton (1890); Princes Bridge to Collingwood (1901); Heidelberg to Eltham (1902);

Eltham to Hurstbridge (1912) ; Darling to Glen Waverley (1929–30) ; Ashburton to Alamein (reconditioned and reopened in 1948) ; Fawkner to Upfield (reopened in 1959) ; Upper Ferntree Gully to Belgrave (converted to broad gauge and electrified in 1962) ; and Lalor to Epping (reopened in 1964).

Australia's first electric train ran from Newmarket to Flemington Race-course on Sunday 6 October 1918. However, electric traction for passengers did not start until the following year.

The line from Essendon to Sandringham was the first converted from steam to electric traction, and on 15 April 1923 the electrification of Melbourne suburban railways, as originally planned, was completed. Since then electric traction has been extended to several sections of the outer suburban area. Victoria, which was first with the steam train, was also first with electric traction in Australia.

Passenger and goods traffic, fares, and freight rates

The general conditions under which goods and livestock are carried by rail are published in the Goods Rates Book, and for rating purposes goods are classified alphabetically into twenty main class rates, while special rates are provided for livestock. Relatively low rates are applicable to agricultural produce and concessions are provided for country industries. Competitive freight contract rates to meet road transport activities operate in the main Victorian country towns, particularly those close to the borders where road competition is intense. Special rates, under agreement with forwarding agents and manufacturers, provide for the transport of goods interstate in specified wagon-loads and also for the carriage of goods in various containers including flexi-vans.

Most of the passenger revenue is derived from the operation of the suburban electrified service ; traffic on this has fallen slightly in recent years. However, additional trains are needed to handle a growing long distance peak period load. In 1946 the number of trains used for peak service was 109 ; in 1969 it was 138. Following elimination of break of gauge at Albury for passenger trains since April 1962, a significant gain has been recorded in passenger traffic between Melbourne and Sydney, and interstate passenger business generally has been active. Introduction of air-conditioned carriages on several country lines in recent years has also resulted in improved services. The ordinary fares are competitive and attractive concessions are available, e.g., to students travelling on vacation, and party travel.

Parcels sent by passenger trains are a large revenue earner.

Standardisation of gauge in Australian network

The track mileage of the standard gauge line between Melbourne and Albury, including loops, departmental sidings, and dual gauge, but not including private sidings, is 243 miles.

Linking of Sydney with Perth by an all standard gauge route through Broken Hill has not been to the disadvantage of Victoria. Melbourne consignors have direct access to the Sydney standard gauge line connecting with every station in New South Wales and with Brisbane, and to the broad gauge line to Adelaide, connecting with practically every important

centre of population in South Australia. These connections give direct rail access to about three quarters of the population of Australia.

Bogie exchange

The standard gauge line from Wodonga to Melbourne provided Melbourne consignors with direct access to the standard gauge network and every station in New South Wales. However, a considerable tonnage of Victorian and overland broad gauge traffic consigned to areas in New South Wales or to Brisbane still required transshipment at either Albury or Melbourne.

The exchange of bogies, introduced in Australia by the Victorian Railways, is now an essential part of interstate railway operations. It has enabled loaded rail wagons to travel over different gauge lines and eliminated the manual transfer of goods from one wagon to another at break of gauge terminals. Bogies can be changed under a loaded vehicle in much less time than that taken for transshipping goods from one wagon to another. The two bogie exchange centres in Victoria at South Dynon and Wodonga handled 39,448 vehicles for the year ended 30 June 1970. With bogie exchange, the tonnage of overland traffic handled in Victoria increased steadily and is now very much greater than that handled in 1962.

Mechanised track maintenance

Using modern mechanised techniques, the Victorian Railways continually maintain and re-lay their railway tracks for passenger and freight traffic. Track maintenance and renewals constitute one of the larger railway budget items, the cost in 1969-70 being \$13.3m.

During the year about 161 miles of track in country districts and 5 miles in the metropolitan area were relaid with heavier rail. Points and crossings were renewed at various locations, using a total of 188 sets of points and 392 crossings.

Further references, 1964-1971

The following tables relate to the State railways and road motor services under the control of the Victorian Railways Commissioners. Certain border railways in New South Wales are, by agreement between the Victorian and New South Wales Governments, under the control of the Victorian Railways Commissioners. Particulars of these have been included with those of the State railways being operated within Victoria. Details of the operations of the road motor services are shown on page 724.

Loan liability and interest

The face value of stock and bonds allocated to the Railways Department, as reduced in accordance with the *Railways (Finances Adjustment) Act* 1936, amounted to \$430.2m at 30 June 1970. After deducting the value of securities purchased from the National Debt Sinking Fund and cancelled (\$62.1m), the net liability on current loans outstanding at that date was \$368.2m.

The total liability of the State for railways construction, etc., at 30 June 1970 (which includes the liability referred to in the previous paragraph) was \$492.2m. Deduction of securities purchased from the National Debt Sinking Fund and cancelled (\$86.4m) together with cash at credit in the Fund (\$1.0m) reduced the amount outstanding at the end of the year to a net liability of \$404.8m.

The *Railways (Funds) Act* 1961 provided that interest and other charges on moneys borrowed for the purposes of the *Railways Act* 1958 should not henceforth be included in the accounts of the Victorian Railways, but would be charged against the revenues of the State. However, the *Railways (Funds) Act* 1964 reimposed on the Railways, with effect from 1 July 1964, the obligation to pay interest and debt charges on moneys borrowed for the purposes of the *Railways Act* 1958 on and after 1 July 1960. The total annual interest payable on the liability of \$404.8m at 30 June 1970 amounted to \$20.2m at an average rate of 5.001 per cent. Of this amount, the Victorian Railways are liable for \$7.9m. In addition, the State is required to pay a contribution of \$3.9m at a rate of 4.5 per cent on cancelled securities.

Additional funds, which amounted to \$55.6m at 30 June 1970, have been provided for railway construction, equipment, stores, etc., out of Consolidated Revenue, the Uniform Railway Gauge Trust Fund, and other funds. No interest is charged against railway revenue on these amounts, with the exception that interest, at 5 per cent, is payable to the Commonwealth on the repayable principal amount outstanding in respect of expenditure on the uniform gauge. (See page 621 of the *Victorian Year Book* 1966.)

Capital cost of railways and equipment

The capital cost of all lines constructed and in course of construction, and of all works, rolling stock, and equipment of the Railway Department as at 30 June of each of the five years 1966 to 1970 is shown in the following table :

VICTORIA—TOTAL CAPITAL COST OF
RAILWAYS, ETC.: EQUIPMENT AND ROLLING STOCK
(\$'000)

At 30 June—	Railways		Road motor services	Total capital cost (a)
	Lines open	Lines in process of construction		
1966	332,956	2,693	61	335,710
1967	345,813	389	45	346,247
1968	357,135	120	36	357,291
1969	368,036	426	28	368,490
1970	377,939	432	20	378,391

(a) Written down in accordance with *Railways (Finances Adjustment) Act* 1936, and allowing for depreciation since 1 July 1937. Particulars are exclusive of the cost of stores and materials on hand and in course of manufacture.

At 30 June 1970 the capital cost of rolling stock, after being written down in accordance with the *Railways (Finances Adjustment) Act* 1936, and allowing for depreciation was : \$101.5m broad gauge, \$10,661 narrow gauge, and \$5.8m uniform gauge.

Railway staff

The number of officers and employees in the Railways Service (including casual labour and butty-gang workers) and the amount of salaries and wages (including travelling and incidental expenses) paid in each of the five financial years 1965–66 to 1969–70 are shown in the following table :

VICTORIA—RAILWAYS STAFF: NUMBERS, SALARIES, ETC.

Period	Number of employees at end of year			Salaries, wages, and travelling expenses
	Permanent	Supernumerary and casual	Total	
1965-66	16,158	11,473	27,631	\$'000 77,980
1966-67	15,704	11,038	26,742	79,464
1967-68	15,422	11,989	27,411	82,862
1968-69	15,179	11,197	26,376	87,529
1969-70	14,588	11,709	26,297	93,415

Railways rolling stock

The following table provides a description of the various types of rolling stock in service (exclusive of road motor rolling stock) for each of the years 1965-66 to 1969-70:

VICTORIA—RAILWAYS ROLLING STOCK IN SERVICE (EXCLUDING ROAD MOTOR SERVICES)

Rolling stock in service	1965-66	1966-67	1967-68	1968-69	1969-70
Locomotives—					
Steam	181	132	50	72	45
Electric	35	35	35	35	35
Diesel electric	185	199	220	237	240
Other (a)	85	87	90	90	33
Total	486	453	395	434	353
Passenger coaches—					
Electric suburban	1,089	1,116	1,113	1,110	1,104
Other (b)	698	675	659	659	637
Total	1,787	1,791	1,772	1,769	1,741
Goods stock (c)	21,914	21,725	21,489	21,374	21,133
Service stock	1,659	1,625	1,625	1,625	1,619

(a) Other locomotives comprise diesel hydraulic locomotives, cranes, rail motor diesel power units, and non-passenger carrying rail tractors.

(b) Passenger coaches owned jointly with New South Wales and South Australia have been included.

(c) All parcels and brake vans and standard gauge stock have been included.

Railways route mileage

The route mileage of the railways (exclusive of road motor service route mileage) for each of the years 1965-66 to 1969-70 is given in the following table.

It should be noted that the Victorian Railways operate certain services in New South Wales. At 30 June 1970 the total length of these services was 204 route miles. This distance is included in the single track broad gauge section of the table.

VICTORIA—RAILWAYS ROUTE MILEAGE (EXCLUDING ROAD MOTOR SERVICES)

(route miles)

Lines open for traffic	1965-66	1966-67	1967-68	1968-69	1969-70
Single track —Broad gauge (a)	3,671	3,711	3,694	3,648	3,637
Narrow gauge	8	8	8	8	8
Double track —Broad gauge (a)	431	431	433	440	440
Other multi-track—Broad gauge (a)	78	79	80	80	80
Total route mileage	4,188	4,230	4,215	4,176	4,165

(a) Broad gauge refers to 5 ft 3 in and 4 ft 8½ in gauge track.

Railways traffic

The traffic of the railways (exclusive of road motor traffic) for each of the years 1965-66 to 1969-70 is shown in the table below :

VICTORIA—RAILWAYS TRAFFIC (EXCLUDING ROAD MOTOR SERVICES)

Traffic		1965-66	1966-67	1967-68	1968-69	1969-70
Traffic train mileage—Country	'000	4,738	4,798	4,833	4,741	4,738
Suburban	'000	8,458	8,504	8,420	8,139	8,361
Goods	'000	6,949	6,733	6,633	6,809	7,445
Total	'000	20,145	20,035	19,886	19,689	20,544
Passenger journeys—Country	'000	4,793	4,674	4,535	4,078	4,000
Suburban	'000	144,332	141,593	141,733	140,788	140,309
Total	'000	149,125	146,267	146,268	144,866	144,309
Goods and livestock carried	'000 tons	12,156	12,075	11,116	11,316	11,835

The tonnage of various classes of goods and the total tonnage of livestock carried by the Victorian Railways for each of the years 1965-66 to 1969-70 are shown in the following table :

VICTORIA—RAILWAYS GOODS AND LIVESTOCK TRAFFIC
(Excluding road motor goods services)
(‘000 tons)

Class of goods	Quantity carried				
	1965-66	1966-67	1967-68	1968-69	1969-70
Butter	82	69	65	68	77
Grain—					
Barley	210	196	136	191	234
Wheat	2,035	1,869	1,231	1,689	1,588
Other	220	322	161	359	312
Flour	153	145	167	157	172
Bran, pollard, and sharps	53	51	50	44	57
Fruit—					
Fresh	92	86	99	83	94
Dried	74	103	72	64	54
Beer	134	140	144	137	144
Briquettes	1,571	1,487	1,416	1,028	1,203
Cement	782	807	766	765	852
Coal—					
Black	195	213	170	75	13
Brown	363	363	326	200	180
Galvanised iron	104	116	71	91	102
Iron, steel, bar rods, etc., unprepared	424	462	498	661	713
Manures	1,154	1,171	877	914	883
Motor cars and bodies	182	197	218	225	288
Petrol, benzine, etc.	133	145	165	182	313
Pulpwood	124	124	101	72	68
Pulp and paper	125	135	138	150	164
Timber	272	252	262	253	260
Wool	133	141	128	140	168
All other goods	3,303	3,322	3,520	3,489	3,602
Total goods	11,917	11,916	10,781	11,037	11,541
Total livestock	239	158	335	279	294
Grand total goods and livestock	12,156	12,075	11,116	11,316	11,835

Railways revenue and expenditure

Revenue for 1969-70 increased by \$4,528,220 compared with 1968-69. Total working expenses increased by \$7,367,356 as compared with the previous year.

Under the provisions of the *Railways (Funds) Act* 1961, an account was created in the Trust Fund and called the "Railway Equalisation Account". The Act provided for the annual appropriation out of the Consolidated Revenue and the payment into the Equalisation Account of any excess of railway income over railway operating expenses for the preceding year. Moneys standing to the credit of the Account were to be available for the purpose of supplementing railway income in the event of its falling short of railway operating expenses. The amounts paid into the Equalisation Account were \$1,840,692 for the year 1960-61, \$7,318 for 1961-62, and \$740,758 for 1963-64. To offset deficits for the years 1962-63 and 1964-65, amounts of \$419,168 and \$2,169,601, respectively, were transferred to Railway Revenue from the Equalisation Account, the latter transfer extinguishing the balance in the Account. The calculation of these amounts was based on Treasury figures (which on the income side are mainly cash records) and not on net revenue shown in the following table.

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
REVENUE					
Passenger, etc., business—					
Passenger fares	27,826	30,162	30,330	30,507	31,754
Parcels, mails, etc.	3,630	4,135	4,077	4,149	4,122
Other	163	88	104	103	104
Goods, etc., business—					
Goods	59,276	61,531	55,465	56,637	59,641
Livestock	1,478	1,026	1,703	1,265	1,521
Miscellaneous	692	769	637	631	607
Miscellaneous—					
Dining car and refreshment services	3,345	3,464	3,451	3,467	3,461
Rentals	1,710	1,880	2,101	2,178	2,340
Bookstalls	1,054	1,053	1,052	1,061	1,096
Advertising	211	228	234	234	246
Other	234	241	240	359	227
Total revenue	99,619	104,579	99,394	100,591	105,119
EXPENDITURE					
Working expenses—					
Way and works	19,633	19,940	20,695	22,372	23,969
Rolling stock	28,997	28,740	27,484	29,137	30,589
Traffic	32,939	34,611	35,876	37,688	40,505
Electrical engineering branch	4,563	4,427	4,494	4,425	4,683
Stores branch	1,426	1,563	1,585	1,633	1,670
Pensions	4,945	5,073	5,273	5,451	5,724
Service grants and retiring gratuities	1,173	1,146	1,116	1,146	1,401
Contributions to Railway Renewals and Replacement Fund	400	400	400	400	400
Contributions to Railway Accident and Fire Insurance Fund	1,315	1,441	1,740	2,116	1,813
Pay-roll tax	1,744	1,852	1,874	1,982	2,125
Long service leave	1,353	1,521	1,606	1,829	2,118
Other (a) (b)	2,664	2,846	3,061	3,164	3,715
Total working expenses	101,151	103,560	105,204	111,344	118,712
Net revenue	-1,532	+1,019	-5,810	-10,753	-13,593

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE—*continued*
(\$'000)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Debt charges—					
Interest charges and expenses (b)	3,726	4,546	5,377	6,221	7,062
Exchange on interest payments and redemption	129	132	119	106	99
Contribution to National Debt Sinking Fund	176	213	251	288	330
Net result for year	—5,563	—3,872	—11,557	—17,368	—21,084
Proportion of working expenses to revenue	101.5	99.0	105.8	110.7	112.9

(a) Including interest paid to Commonwealth under Railways Standardisation Agreement, namely, 1966, \$224,898; 1967, \$220,000; 1968, \$215,103; 1969, \$210,204; and 1970, \$205,306.

(b) Including loan conversion expenses.

The gross revenue and working expenses per average mile of railway worked for each of the five years 1965-66 to 1969-70 are shown in the following table :

VICTORIA—RAILWAYS REVENUE AND EXPENDITURE PER AVERAGE
MILE OPEN (EXCLUDING ROAD MOTOR SERVICES)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Average number of miles open for traffic	4,189	4,218	4,210	4,190	4,170
Gross revenue per average mile open \$	23,765	24,777	23,594	23,992	25,193
Working expenses per average mile open \$	24,112	24,519	24,961	26,543	28,431

Road motor services

The following table gives, for each of the five years 1965-66 to 1969-70, particulars of the operations of the road motor services under the control of the Railways Commissioners :

VICTORIA—ROAD MOTOR SERVICES
(Under the control of the Railways Commissioners)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Car mileage	314,337	283,301	241,069	258,561	270,241
Passenger journeys	1,060,324	1,033,774	888,834	902,967	926,435
Gross revenue \$	68,925	70,287	62,216	62,378	65,516
Working expenses \$	145,393	136,571	119,601	128,057	153,455
Capital expenditure at end of year (less depreciation written off) \$	60,859	44,990	36,374	27,758	20,471

NOTE. The apparent discrepancy between the amount of working expenses and revenue was brought about by revenue not having received a proportion of combined rail and road services earnings, while working expenses have been charged with road motor operating cost in full.

Tramway and omnibus services

Melbourne and Metropolitan Tramways Board

The Melbourne and Metropolitan Tramways Act provides for a Board consisting of chairman, deputy chairman, and a member appointed by the Governor in Council. Subject to the direction of the Minister, the Board controls, manages, operates, and maintains the tramways of the metropolitan area, and a fleet of buses plying on routes permitted by the Transport Regulation Board.

Particulars relating to the tramway systems under the control of the Melbourne and Metropolitan Tramways Board are shown for each of the years 1965-66 to 1969-70 in the following table :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
TRAMWAYS

Period	Track open at end of year		Tram mileage	Passenger journeys	Operating receipts	Operating expenses	At end of year	
	Double	Single					Rolling stock	Persons employed
	miles	miles	'000	'000	\$'000	\$'000	number	number
1965-66	134	4	16,609	140,556	14,727	15,636	693	3,786
1966-67	134	4	16,571	131,876	15,921	16,440	693	3,745
1967-68	134	3	16,480	127,575	15,628	16,604	691	3,726
1968-69	134	3	16,069	119,009	15,946	17,042	698	3,525
1969-70	134	3	15,273	110,692	16,682	17,766	(a) 698	(b) 4,159

(a) Includes 44 in reserve or idle.

(b) Includes omnibus employees. Tramways employees not available separately.

As the community grows and the use of private motor vehicles extends, passengers using public transport become fewer and this causes financial strain. Notwithstanding this, the Board has a policy of expansion and in 1961 acquired a privately owned network of buses in the rapidly developing suburbs of Box Hill, Nunawading, Ringwood, Mitcham, Doncaster, Bulleen, and Warrandyte, and extended some other services.

Details of the revenue and expenditure of the Melbourne and Metropolitan Tramways Board for the years 1966-67 to 1969-70 are shown in the following table :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
REVENUE, EXPENDITURE, ETC.
(\$'000)

Particulars	1966-67	1967-68	1968-69	1969-70
REVENUE				
Traffic receipts	19,060	18,864	19,269	20,141
Miscellaneous operating receipts	176	176	176	176
Non-operating receipts	312	287	240	251
Total revenue	19,548	19,327	19,685	20,568
EXPENDITURE				
Traffic operation costs	9,096	9,325	9,595	9,788
Maintenance—				
Permanent way	960	903	934	970
Tramcars	2,457	2,480	2,550	2,685
Buses	765	851	921	989
Electrical equipment of lines and substations	474	526	537	594
Buildings and grounds	206	245	264	302
Electric traction energy	874	884	874	831
Fuel oil for buses	184	197	190	186
Bus licence and road tax fees	25	23	21	21
General administration and stores department costs	1,178	1,166	1,173	1,394
Pay-roll tax	346	355	367	380
Workers compensation payments	496	407	465	418
Depreciation	1,014	1,001	1,018	1,008
Non-operating expenses	65	76	96	86

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
REVENUE, EXPENDITURE, ETC.—*continued*

Particulars	1966-67	1967-68	1968-69	1969-70
Provisions—				
Long service leave	290	292	290	396
Retiring gratuities	527	543	486	671
Accrued sick leave	56	92	70	96
Public risk insurance	286	231	300	220
Interest on loans	1,222	1,274	1,311	1,358
Obsolescence in stores stock	8	..	..	..
Total expenditure	20,529	20,871	21,462	22,393
Net surplus (+) or deficit (—)	—981	—1,544	—1,777	—1,825
Capital outlay	1,317	938	691	695
Loan indebtedness at 30 June	23,397	23,840	24,224	24,874

In the following table, the operations of the motor omnibus systems of the Melbourne and Metropolitan Tramways Board are shown for each of the years 1965-66 to 1969-70 :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
MOTOR OMNIBUS SYSTEMS

Period	Route miles	Bus mileage	Passenger journeys	Operating receipts	Operating expenses	At end of year	
						Rolling stock	Persons employed
		'000	'000	\$'000	\$'000	number	number
1965-66	123	6,763	25,120	2,871	3,809	231	828
1966-67	126	6,931	25,107	3,315	4,024	223	817
1967-68	140	7,335	25,576	3,413	4,192	233	844
1968-69	139	7,099	24,271	3,499	4,324	226	791
1969-70	139	6,923	22,353	3,635	4,540	(a) 277	(b) 4,159

(a) Includes 45 in reserve or idle.

(b) Includes tramways employees. Omnibus employees not available separately.

The following tables give an analysis of operating receipts, operating expenses, etc., for each of the five years 1965-66 to 1969-70 :

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
TRAMWAYS : OPERATING RECEIPTS, OPERATING EXPENSES, ETC.,
PER MILE, ETC.

Period	Operating receipts			Operating expenses		Ratio operating expenses to operating receipts
	Amount	Per vehicle mile	Per passenger	Amount	Per vehicle mile	
	\$'000	cents	cents	\$'000	cents	per cent
1965-66	14,727	88.67	10.48	15,636	94.14	106.17
1966-67	15,921	96.08	12.07	16,440	99.21	103.26
1967-68	15,628	94.83	12.25	16,604	100.75	106.25
1968-69	15,946	99.24	13.40	17,042	106.06	106.87
1969-70	16,682	109.23	15.07	17,766	116.33	106.50

VICTORIA—MELBOURNE AND METROPOLITAN TRAMWAYS BOARD :
MOTOR OMNIBUS SYSTEMS : OPERATING RECEIPTS, OPERATING
EXPENSES, ETC., PER MILE, ETC.

Period	Operating receipts			Operating expenses		Ratio operating expenses to operating receipts
	Amount	Per vehicle mile	Per passenger	Amount	Per vehicle mile	
	\$'000	cents	cents	\$'000	cents	per cent
1965-66	2,871	42.45	11.43	3,809	56.32	132.67
1966-67	3,315	47.83	13.20	4,024	58.06	121.39
1967-68	3,413	46.53	13.34	4,192	57.15	122.82
1968-69	3,499	49.29	14.42	4,324	60.91	123.58
1969-70	3,635	52.51	16.26	4,540	65.58	124.91

Private motor omnibus services

The following table contains particulars of the operations of Victorian private omnibus services. In addition to details of route operations, charter, school, and other special services are included. In the year 1969-70 route operations accounted for 63 per cent of total mileage travelled, while charter, school, and other special services accounted for 7, 27, and 3 per cent, respectively.

VICTORIA—PRIVATE MOTOR OMNIBUS SERVICES

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Number of vehicles	2,843	2,701	2,846	2,811	2,899
Mileage—Petrol vehicles	'000 miles 35,669	'000 miles 35,114	'000 miles 36,079	'000 miles 34,627	'000 miles 34,349
Diesel vehicles	'000 miles 16,461	'000 miles 16,713	'000 miles 19,995	'000 miles 20,308	'000 miles 22,679
Total mileage	'000 miles 52,130	'000 miles 51,826	'000 miles 56,074	'000 miles 54,935	'000 miles 57,028
Revenue	\$'000 18,476	\$'000 19,628	\$'000 21,297	\$'000 22,057	\$'000 23,721
Expenditure—					
Drivers' wages	6,068	6,273	6,904	7,270	7,974
Repairs and maintenance	2,268	2,431	2,646	2,734	2,913
Depreciation	1,887	1,910	2,062	2,045	2,181
Other	6,203	6,620	7,441	7,343	7,997
Total expenditure	16,426	17,234	19,053	19,392	21,065
Assets (a)—					
Motor vehicles	5,403	5,199	5,758	5,645	5,988
Other assets	7,081	7,444	8,120	8,609	9,671
Total assets	12,484	12,643	13,878	14,254	15,659
Liabilities (a)	4,417	4,534	5,650	5,762	6,546

(a) Incomplete. Assets and liabilities of operators engaged solely in school bus services are not available.

Tramways in provincial cities

The cities outside the metropolitan area having electric tramway systems at 30 June 1970 were : Ballarat, with 13.84 miles of lines (2.33 double and 11.51 single track) and Bendigo, with 8.64 miles of lines (2.43 double and 6.21 single track). Both of these systems were operated by the State Electricity Commission of Victoria. (See page 733 for further information.)

The traffic particulars of these lines for each of the five years 1965-66 to 1969-70 are summarised in the following table :

VICTORIA—TRAMWAYS IN PROVINCIAL CITIES

Period	Track open		Tram mileage	Passenger journeys	Traffic receipts	Operating expenses	Rolling stock	Persons employed
	Double	Single						
	miles	miles	'000	'000	\$'000	\$'000	number	number
1965-66	5	18	830	4,333	248	720	46	187
1966-67	5	18	836	3,861	282	755	48	184
1967-68	5	18	824	3,537	265	753	48	185
1968-69	5	18	828	3,237	264	744	46	174
1969-70	5	18	801	2,902	262	761	48	168

Further references, 1961-1971; Melbourne tramways 1930-1961, 1963

Motor vehicles

Registration, licences, etc.

Every motor car and motor cycle must be registered with the Chief Commissioner of Police if used on Victorian roads. All trailers (except agricultural implements and certain small trailers for private use), fore-cars, and side cars drawn by or attached to motor cars or motor cycles must also be registered.

The following is a brief summary of the annual fees applicable at 1 March 1971 in respect of the principal types of registration and for the licensing of drivers and riders :

VICTORIA—REGISTRATION AND LICENCE RATES AT 1 MARCH 1971

Type of registration or licence	Annual rate
REGISTRATION—	
Motor cycle (without trailer, etc.)	\$4.10
Motor cycle (with trailer, etc., attached)	\$6.10
Motor car (private use)	\$0.60 for each power-weight unit (a)
Motor car (private and business use)	\$0.75 for each power-weight unit (a)
Trailer (attached to motor car)	From \$2.50 each, according to the unladen weight and use
Motor car (commercial passenger vehicle) operating on a stage omnibus service or a temporary school service licence	\$15
Motor car (used for carrying passengers or goods for hire or in the course of trade)	From \$1.10 to \$1.60 for each power-weight unit (a) according to the unladen weight and the type of tyres
Motor car (constructed for the carriage of goods owned by primary producers and used solely in connection with their business)	From \$0.30 to \$1.30 for each power-weight unit (a) according to the number of wheels and the type of tyres. (When more than one motor car is so owned, the rate shall apply to one motor car only.)
Mobile crane, self-propelled (used otherwise than for lifting and towing vehicles)	\$27.10 (Unless a lower fee would otherwise have been payable.)
LICENCE—	
Driver's or rider's licence	\$12 issued for a three year period. (An additional fee of \$6 is payable by all applicants for new licences.)
Learner's permit	\$2 for motor cycles only
Instructor's licence	\$40 issued for a three year period

(a) The number of power-weight units is that number which is equal to the sum of the horsepower and the weight in hundredweights of a motor car unladen and ready for use.

NOTE. The minimum annual fee for the registration of any motor vehicle other than a motor cycle is \$12.

The following tables show, for each of the years 1965-66 to 1969-70, the number of drivers' and riders' licences in force and the total revenue received at the Motor Registration Branch of the Police Department :

VICTORIA—DRIVERS' AND RIDERS' LICENCES IN FORCE AT 30 JUNE

Type of licence	1966	1967	1968	1969	1970
Drivers'	1,227,990	1,280,459	1,337,381	1,399,903	1,464,523
Riders'	31,487	32,832	34,292	35,894	37,551
Total	1,259,477	1,313,291	1,371,673	1,435,797	1,502,074

**VICTORIA—GROSS REVENUE COLLECTED BY MOTOR
REGISTRATION BRANCH
(\$'000)**

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Registrations and tax	41,052	43,299	47,219	54,190	57,842
Drivers' licences	2,872	2,746	2,792	3,272	3,177
Other	581	612	748	764	810
Total	44,505	46,657	50,759	58,226	61,829

The following table shows the number of motor vehicles on the register by type at the end of each of the years 1955 and 1962 (motor vehicle census years), 1968, 1969, and 1970. Particulars of Commonwealth-owned vehicles with the exception of defence service vehicles are included. Tractor-type vehicles, plant, and trailers are excluded.

VICTORIA—MOTOR VEHICLES ON THE REGISTER ACCORDING TO TYPE

Type of vehicle	At 31 December—				
	1955	1962	1968	1969	1970
Cars (a)	422,543	611,496	807,028	852,365	903,247
Station wagons	5,690	69,528	173,216	184,825	194,893
Utilities	75,721	94,470	91,674	91,719	92,323
Panel vans	19,913	31,328	36,557	37,724	38,950
Trucks (b)	70,362	79,482	92,432	94,992	97,328
Omnibuses	2,580	3,409	4,365	4,625	4,962
Total (excluding motor cycles)	596,809	889,713	1,205,272	1,266,250	1,331,703
Motor cycles (c)	26,406	15,802	17,042	19,881	24,847
Grand total	623,215	905,515	1,222,314	1,286,131	1,356,550

(a) Includes ambulances and hearses.

(b) Includes trucks and truck-type vehicles, but excludes tractors, plant, and trailers.

(c) Includes motor scooters.

The following tables, giving new vehicle registrations by types and makes of vehicles, include details of Commonwealth-owned vehicles (other than those of the defence services). They are not strictly comparable with the preceding table.

**VICTORIA—REGISTRATION OF NEW MOTOR CARS AND
STATION WAGONS ACCORDING TO MAKE**

(Includes Commonwealth-owned vehicles other than those of the defence services)

Make	Motor cars (a)			Station wagons		
	1968	1969	1970	1968	1969	1970
Austin	3,567	3,057	3,268	..	1	..
B.M.W.	72	118	181	..	..	..
Chrysler	8,218	9,227	8,212	2,297	2,221	1,633
Datsun	2,822	3,385	4,274	457	247	165
Fiat	634	993	1,015	22	2	13
Ford	16,936	18,808	22,193	3,414	3,544	3,708
Hillman	2,437	2,962	2,510	297	525	443
Holden	26,230	30,167	32,172	7,675	7,505	7,371
Honda	328	530	856	1	..	..
Jaguar	220	159	305	..	..	..
M.G.	380	405	383	..	..	..
Mazda	2,413	3,254	4,014	242	278	295
Mercedes Benz	641	624	588	..	..	..
Mitsubishi	196	151	283	..	..	..
Morris	5,720	5,215	4,104	1	..	..
Peugeot	549	640	520	64	62	25
Renault	1,070	1,389	1,550	1	..	..
Toyota	7,027	6,882	7,136	532	440	381
Triumph	441	513	637	..	..	..
Volkswagen	2,688	1,952	2,506	371	498	526
Other	1,861	1,665	1,295	57	66	49
Total	84,450	92,096	98,002	15,431	15,389	14,609

(a) Includes ambulances, hearses, and cars other than sedans.

**VICTORIA—REGISTRATIONS OF NEW MOTOR VEHICLES OTHER THAN
MOTOR CARS, STATION WAGONS, AND MOTOR CYCLES
ACCORDING TO MAKE**

(Includes Commonwealth-owned vehicles other than those of the defence services)

Make	1969				1970			
	Utilities	Panel vans	Other (a)	Total	Utilities	Panel vans	Other (a)	Total
Austin	146	..	..	146	121	..	..	121
B.M.C. (b)	129	27	300	456	89	3	96	188
Bedford	2	94	1,746	1,842	3	..	1,445	1,448
Chrysler	622	..	..	622	429	1	..	430
Commer	2	50	337	389	..	33	265	298
Datsun	292	52	372	716	271	49	464	784
Dodge	268	12	680	960	320	8	642	970
Ford	1,746	752	1,417	3,915	1,865	989	1,371	4,225
Holden	3,045	1,767	..	4,812	2,979	1,866	..	4,845
International	106	26	1,448	1,580	76	25	1,563	1,664
Land Rover	237	2	38	277	293	20	31	344
Mazda	43	162	54	259	39	201	75	315
Morris (b)	..	599	..	599	..	471	..	471
Toyota	368	148	776	1,292	359	145	924	1,428
Volkswagen	87	51	707	845	53	43	783	879
Other	38	31	693	762	75	79	857	1,011
Total	7,131	3,773	8,568	19,472	6,972	3,933	8,516	19,421

(a) Other vehicles including trucks, omnibuses, milk tankers, petrol tankers, etc.

(b) Since 1 January 1969 B.M.C. includes all Austin and Morris commercial vehicles except Austin 15 hp utilities and Morris 10 hp panel vans.

Transport Regulation Board

The *Transport Regulation Act* 1932 set up a Board of Inquiry to investigate Victoria's land transport problems. The recommendations of this Board led to the constitution of the Transport Regulation Board in 1934. The Board, consisting of a chairman, a primary producers' representative, and a representative of commercial interests outside a radius of 25 miles of the G.P.O., Melbourne, is a statutory authority and, at present, derives its authority from the *Transport Regulation Act* 1958 and the *Commercial Goods Vehicles Act* 1958. The chairman of the Board is a statutory member of the Metropolitan Transportation Committee.

VICTORIA—TRANSPORT REGULATION BOARD: LICENCES ISSUED : SUMMARY OF FINANCIAL OPERATIONS

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Licences issued "as of right"—					
25 miles radius of the G.P.O. or P.O.—					
Melbourne	14,798	14,831	15,147	15,316	15,466
Ballarat	1,537	1,512	1,507	1,544	1,514
Bendigo					
Geelong					
25 miles radius of owner's place of business	6,714	6,821	6,909	6,970	6,904
Primary producers (vehicles over 2 tons load capacity)	17,080	17,414	17,313	17,522	17,705
Butter, milk, and cheese factories	708	694	546	501	428
50 miles radius of owner's place of business (vehicles up to 4 tons load capacity)	47,218	49,498	51,618	53,886	55,553
Third Schedule commodities	12,203	12,548	12,684	13,062	13,136
Approved decentralised secondary industries	679	768	799	899	969
"Discretionary" licences—					
Passenger	6,603	6,576	6,543	6,563	6,563
Temporary passenger	221	214	177	172	165
Goods (4 years)	10,995	11,582	12,518	13,357	14,208
Temporary goods	963	756	807	590	534
Goods—passenger	52	46	38	34	32
Total licences issued	119,771	123,260	126,606	130,416	133,177
Financial transactions—					
Revenue	\$'000 (a) 2,025	\$'000 2,383	\$'000 2,403	\$'000 2,511	\$'000 2,662
Expenditure (including payments to local authorities for road maintenance, comfort stations, and bus shelters)	1,636	1,860	1,990	2,172	2,452
Balance	389	523	413	339	210
Road charges collected and transferred direct to Country Roads Board	6,378	6,733	7,248	7,841	8,758
Motor boat registration fees collected and paid to Tourist Fund	179	193	219	233	254
Log book fees (b)	(b)	5	21	11	11

(a) Includes amount recouped from Country Roads Board for road charges collected.

(b) As from 15 May 1967 all collections paid to Country Roads Board.

Licences

With the exception of vehicles used exclusively on interstate trade and primary producer vehicles not exceeding 2 tons load capacity, all commercial passenger and goods vehicles are subject to the control and licensing of the Board. Licences issued fall into two broad groups.

The first group, which comprises the majority of licences in force, are issued on application and are classed "as of right" goods licences. These licences are issued at a fee fixed by legislation and confer rights clearly defined in that legislation. They confer restricted rights and are confined to commercial goods vehicles.

The second group, termed "discretionary" licences, are issued at the discretion of the Board. The legislation sets out fully the matters to be taken into consideration by the Board before granting or refusing passenger or discretionary goods licences. All licences for passenger vehicles fall into this category.

Permits

Permits are issued at the discretion of the Board to authorise temporarily the operation of a vehicle in a manner not specified in the licence. For the year ended 30 June 1970 the number of goods permits and passenger permits issued were 159,718 and 7,182, respectively.

Drivers' certificates

Commercial passenger vehicles. Every driver of a commercial passenger vehicle must possess a driver's certificate issued by the Board. This certificate is a separate authority additional to the motor car driver's licence issued by the Police. Each application for a certificate must be accompanied by a satisfactory medical and eyesight report. A medical and eyesight report is then required at three-yearly intervals, or more frequently if the holder of a certificate is subject to some disability or is over sixty years of age. If the applicant is medically acceptable, his application is forwarded to the Chief Commissioner of Police for a check and report on character, traffic record, and general suitability. Before issue of a certificate, the Board has to be satisfied that the applicant is a "fit and proper" person to drive a public service vehicle. Prospective drivers of metropolitan taxi-cabs and hire-cars must, in addition, pass a test of knowledge of the metropolitan area and a special Police driving aptitude test. Some 3,960 applications for drivers' certificates were made during 1969-70, an increase of 241 over that of the previous year. Of this total, 2,881 certificates were issued, 1,177 of these being to drive metropolitan taxi-cabs or hire-cars and 1,704 for buses and country taxi-cabs. Since the acceptance of female drivers into the taxi industry late in 1968 a total of 124 have been authorised to drive metropolitan taxis. At 30 June 1970 the 14,241 certificates on issue to drivers of commercial passenger vehicles consisted of the following types : buses 4,802 ; taxis 9,161 ; goods/passenger 239 ; temporary 39.

Tow trucks. Every driver of a tow truck must possess a driver's certificate issued by the Board before he can legally drive such a vehicle.

A certificate is issued only after the applicant's character, traffic record, and general suitability have been checked by the Police. The minimum age requirement for applicants is 21 years, although some exceptions are permitted in the case of apprentices or full-time employees of tow truck owners. At 30 June 1970 there were 2,098 certificates on issue.

Passenger fares and hiring rates

As from 1 November 1970 the Board approved omnibus fare increases in the metropolitan area and the three urban districts of Ballarat, Bendigo, and Geelong. The fares are :

Section travelled	Adult fare cents	Children's fare cents
1	10	5
2	15	9
3	18	10
Extra sections	1	Various

Taxi fare increases were approved by the Board from 13 December 1970 for the metropolitan area and the three urban districts. The rates include :

Flagfall	25 cents (including first 2/11th of a mile)
Mileage rate	22 cents (2 cents each 1/11th of a mile)
Detention	\$3.00 per hour
Service fee	15 cents per hiring made through depot
Luggage	5 cents each item carried outside passenger compartment.

Public hearings

Public hearings are designed to give all parties concerned with matters affecting the issue of discretionary licences, or those of a generally contentious nature, an opportunity to present their views to the Board. During the year ended 30 June 1971 the Board heard seventeen applications for discretionary goods licences at public hearings held at Melbourne, Maldon, and Mallacoota.

The major hearings were concerned with the transport of primary producer requirements between the Shelbourne area and Melbourne and Geelong. Although the rail line to Shelbourne had recently been closed, the Board decided that there were adequate rail services adjacent to the area that could be utilised. Others were associated with the carriage of materials and products by hire and reward carriers on behalf of country decentralised secondary industries located at Ballarat, Shepparton, Maryvale, and Colac. Except in the Shepparton and Colac cases where road authority was limited to a proportion of the traffic, these applications were granted. Another hearing concerned a general goods service between Melbourne and the Genoa-Mallacoota area. Two earlier unsuccessful approaches had been made on this basis. However, as reduced railway freights from Melbourne to the railhead had failed to arrest the transfer of traffic to interstate operators during a prolonged trial period, the area had constantly pressed for a road service, and subsequently a licence was granted.

In relation to commercial passenger vehicles, forty-nine applications for new licences or variation of existing licences were heard during the year.

In view of the Government's approval of the recommendations by the Board regarding the replacement of the electric tramway services in the urban areas of Ballarat and Bendigo, major hearings were held to determine applications for omnibus services. In the Ballarat urban area, the Board concluded that service along the tram routes could best be provided under the control of one operator. Some modifications of the existing urban bus services in Ballarat have been approved and implementation was introduced in three stages from 23 August 1971. In the case of Bendigo the operational changeovers occurred between 16 March and 17 April 1972.

The Board also introduced changes to omnibus charter policy. Following a public hearing held in June 1970, the Board extended the metropolitan omnibus charter radius from 50 miles to State-wide for an experimental period of twelve months subject to trip permit authority being obtained. In addition special service omnibuses were given an extended franchise from 15 miles to 20 miles of the G.P.O., Melbourne. This was similarly authorised experimentally for twelve months on a trip permit basis.

Board of Inquiry into Land Transport in Victoria

This Inquiry was set up by the Government in November 1970 with Sir Henry Bland constituting the Board, to inquire into, report upon, and make recommendations concerning the existing system of land transport in Victoria (with the exception of passenger transport within the areas of metropolitan Melbourne and the urban areas of Ballarat, Bendigo, and Geelong for which transportation plans have been or are being prepared) and in particular :

1. whether the existing land transport system is satisfactory to meet the needs of agriculture, commerce and industry, and the public ;
2. whether the present division of freight traffic as to area and type of goods between road and rail is desirable ;
3. whether there is duplication of existing transport services which is wasteful and, if so, how such duplication could be avoided ;
4. whether the existing system of transport regulation allows a flexible transport system which can adapt reasonably to changing conditions ;
5. what changes, if any, should be brought about in the system of transport regulation and the provision of rail services to give the most efficient transport service practicable in the public interest ; and
6. what effect any changes proposed would be likely to have on the transport industry and government finances generally.

The Board of Inquiry received written submissions from a wide variety of interested parties and also conducted a number of hearings at Melbourne and country centres. The Board's Report was presented early in 1972.

Enforcement

Enforcement action relating to the provisions of the Transport Regulation Act, the Commercial Goods Vehicles Act, and the Transport Consolidated Regulations is the responsibility of the Board's field staff comprising inspectors located at head office and at twelve regional offices. In addition, the Board assists in policing relevant provisions of the Motor Car Act and Regulations and the Road Traffic Act and Regulations. While the Board is the registering authority for motor boats, its staff does not police the regulations governing craft specifications, equipment, and behaviour of drivers; this is handled by Police and local authorities.

A brief summary of prosecutions taken before the courts under legislation mentioned above is given in the following table :

VICTORIA—TRANSPORT REGULATION BOARD :
PROSECUTIONS, 1969-70

Act or Regulations	Cases
Transport Regulation Act (Passenger)	82
Commercial Goods Vehicles Act Part I	855
Transport Consolidated Regulations 1960	515
Motor Car Act	3,248
Motor Car Regulations	582
Road Traffic Regulations	714
Police Offences Act (Summary Offences Act)	8
Justices Act	3
Drugs of Addiction and Restricted Substances Regulations	4
Total	6,011

Standards

As the licensing authority for all commercial passenger vehicles, the Board is also responsible for the safe operation and vehicle standards of licensed commercial passenger vehicles.

In the case of taxi-cabs, the Board's requirement of replacement when a car reaches four years from the date of first registration (a longer life of 6 years is conceded for large cars) has improved the standard of cars in the taxi and hire car fleet throughout the State.

The increase in permitted vehicle dimensions to a width of 8 ft 2½ inches and a length of 36 ft has enabled bus operators to cater for larger hiring parties, or alternatively to install better types of luxury seating without reducing previous seating capacities. Larger vehicles on route services are also proving useful in coping with peak demands. The tendency for some bus operators to defer replacement of vehicles, and to continue to present old buses for annual safety and roadworthiness inspection, has been checked by Board action in evaluating all vehicles over 10 years in service, and warning owners in advance when replacement will be required. The Board also requires to be notified when a replacement vehicle, new or secondhand, is intended to be purchased, and where an operator proposes any major reconstruction or "face lifting" of an existing licensed vehicle. In all these cases the Board has the right to reject the vehicle for licensing or further licensing. Powers exist under the Act and Regulations to enable the Board to cancel or refuse a licence for a vehicle classed as "unsuitable" for the purpose for which it is to be used. Safety in passenger vehicle operation is of prime concern to the Board.

During the year 6,726 passenger vehicles were inspected.

Road maintenance charges

Owners of commercial goods vehicles with a load capacity exceeding four tons are required to pay a ton-mile charge as compensation for wear

and tear caused to Victorian roads. This charge is made at a rate of 5/18ths of a cent per ton-mile, based on the tare weight of the vehicle plus 40 per cent of its load capacity. Journeys made solely in connection with the carriage of certain primary produce and livestock do not attract this charge. Vehicles operating on interstate trade are not exempt. At 30 June 1970 there were 40,335 vehicles with registered load capacities exceeding four tons.

Motor boats

The Board registers privately used motor boats not exceeding 65 ft in length. The Victoria Police, assisted by other government authorities, are responsible for the enforcement of regulations governing the operation of boats and use of equipment. At 30 June 1970 the number of motor boats on the register was 46,257.

Metropolitan Transportation Committee

The Metropolitan Transportation Committee was established by the provisions of the *Metropolitan Transportation Committee Act 1963*. The members of this Committee are the Minister of Transport (chairman); the Minister for Local Government; the chairmen of the Victorian Railways Commissioners, Melbourne and Metropolitan Tramways Board, Transport Regulation Board, Country Roads Board, Road Safety and Traffic Authority, and Melbourne and Metropolitan Board of Works; a councillor nominated by the Melbourne City Council; the Chief Planner of the Melbourne and Metropolitan Board of Works; the Director of Finance; and the Director of Transport.

The functions of the Committee are to advise the Governor in Council on any matter relating to the planning, development, and improvement of transport services within the metropolitan area, and the supervision, co-ordination, and control of the activities of the bodies concerned, and to make such inquiries as it thinks fit in that behalf.

The Act requires that no body represented on the Committee shall proceed with any major project or plan which may affect public transport provided by any other such body in the metropolitan area unless it has first been submitted to and considered by the Committee. The provision does not apply to the granting of licences or permits for public transport services.

In September 1963 the Committee commenced a comprehensive transportation study within the metropolitan area. Using the results obtained from surveys conducted during 1964 the planning group of engineers, drawn from the bodies represented on the Transportation Committee, has prepared a comprehensive plan of roads and public transport which will be needed to carry the traffic projected for the year 1985.

Further reference, 1968

Road Safety and Traffic Authority

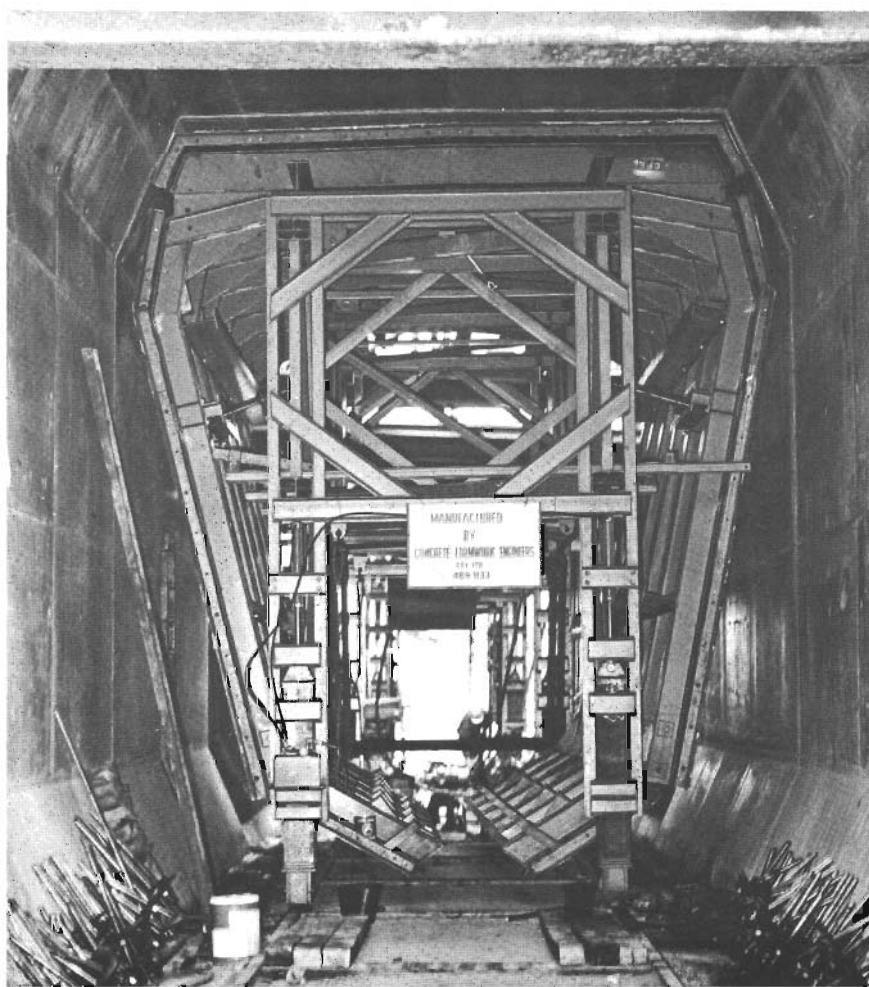
Traffic control

The Traffic Commission was constituted by the provisions of the *Road Traffic Act 1958* and before this the only legislation on traffic control was the prohibition of prescribed actions. In 1968 the results of technical experience and work done in the intervening years were consolidated in the



Construction work on Melbourne's underground railway, which was officially begun on 22 June 1971.

*Melbourne Underground Rail
Loop Authority*





Floods near Orbost in February 1971.
The Age

Flood water in Elizabeth Street, Melbourne, on 17 February 1972. The heaviest city downpour ever recorded caused extensive damage.
The Age



Road Traffic Regulations. The major changes during this period were the adoption of centre of the road turns, a realistic range of speed limits, and "signpost" legislation. Road traffic measures adopted include the development of more sophisticated traffic-signal equipment to allow for variations in the volume of traffic movement at given periods and devices such as lights, road marks, and barriers designed to influence driver behaviour. In 1970-71 about \$1.7m was spent on traffic control devices.

During the last two decades major relocations, new alignments and new freeways and roadways have been constructed; in addition, the Forests Commission, Country Roads Board, Melbourne and Metropolitan Board of Works, and park managements have constructed many new roads to provide access to new areas and cater more for tourists. A new era in metropolitan transportation began in 1960 when the South Eastern Freeway was opened. Three years later the Metropolitan Transportation Committee was established to plan the development of an integrated transport system for the Melbourne metropolitan area.

Previously matters such as parking and direction of traffic were controlled by various government regulations and municipal by-laws but the 1968 regulations vested this power in councils. More efficient enforcement of these regulations was possible with the introduction of parking tickets in 1959 and traffic tickets in 1965.

More detailed road accident data have enabled Police and traffic officials to analyse the various features associated with accidents. The Commission has worked on accident reduction projects using funds from the Commonwealth Aid Road Fund in studying major arteries in the metropolis and country. In December 1970 legislation was passed to make it compulsory to wear seat belts in cars where fitted, those cars manufactured and first registered after 1 January 1971 being required to have seat belts fitted to both front seats and rear seats.

The creation of the Road Safety and Traffic Authority which replaced the Traffic Commission in 1971 gave further impetus to the development of accident reduction measures. The new authority is responsible for research into accident prevention, advising the Minister on traffic policy, and recommending suitable regulations. It provides strong support to the Parliamentary Road Safety Committee.

Road traffic accidents

The following tables include particulars of all road traffic accidents reported by the Victoria Police during the periods specified, which satisfied the following conditions :

1. that the accident occurred on any road, street, lane, thoroughfare, footpath, or place open to or used by the public by right or custom, at the time of the accident ;
2. that it involved :
 - (i) any road vehicle which, at the time of the accident, was in motion ; or
 - (ii) any animal which, at the time of the accident, was in motion and was being used for the purpose of transportation or travel ; or

(iii) any train passing over a level crossing for the time being open to the public ; and

3. that the accident resulted in :

(i) death of any person within a period of thirty days after the accident ; or

(ii) bodily injury to any person to an extent requiring surgical or medical treatment.

The tables do not include figures of accidents on railway lines (except at level crossings), or on private property. For these and other reasons, the total number of deaths shown in these tables is not comparable with those shown on page 158.

VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES :
NUMBER OF PERSONS KILLED OR INJURED

Period	Number of accidents	Persons killed	Persons injured	Per 100,000 of mean population		
				Number of accidents	Persons killed	Persons injured
1955-56	10,606	582	13,483	415	23	527
1956-57	10,804	589	14,120	411	22	538
1957-58	11,233	571	15,015	418	21	559
1958-59	12,462	661	16,784	453	24	610
1959-60	12,267	698	16,595	435	25	589
1960-61	12,140	773	16,757	420	27	579
1961-62	11,639	818	16,074	394	28	544
1962-63	12,330	803	17,149	409	27	569
1963-64	13,067	838	18,401	425	27	599
1964-65	14,432	907	20,482	460	29	653
1965-66	14,110	933	20,277	442	29	635
1966-67	14,077	963	19,994	433	30	615
1967-68	15,113	868	21,932	458	26	664
1968-69	15,622	964	22,498	466	29	670
1969-70	17,030	1,065	24,502	498	31	717

The table which follows provides a description of types of road users killed or injured in road traffic accidents occurring during the years 1967-68 to 1969-70 :

VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES :
DESCRIPTION OF PERSONS KILLED OR INJURED

Description	1967-68		1968-69		1969-70	
	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	317	8,787	391	9,109	418	10,198
Motor cyclists	15	501	29	642	19	729
Passengers (any type)	261	9,004	289	8,997	315	9,732
Pedestrians	229	2,612	215	2,716	270	2,797
Pedal cyclists	39	979	36	991	40	1,015
Other	7	49	4	43	3	31
Total	868	21,932	964	22,498	1,065	24,502

Particulars of victims of road traffic accidents during the years 1967-68 to 1969-70 are shown according to age in the following table :

**VICTORIA—ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES :
AGE OF PERSONS KILLED OR INJURED**

Age group (years)	1967-68		1968-69		1969-70	
	Killed	Injured	Killed	Injured	Killed	Injured
Under 5	31	733	29	774	36	874
5 and under 7	15	431	15	462	16	467
7 and under 17	57	2,525	76	2,513	82	2,754
17 and under 21	147	4,698	163	4,734	191	5,088
21 and under 30	181	4,989	211	5,314	197	5,855
30 and under 40	85	2,589	102	2,627	113	2,896
40 and under 50	86	2,338	97	2,380	115	2,615
50 and under 60	90	1,655	109	1,710	107	1,788
60 and over	176	1,608	159	1,627	208	1,778
Not stated	..	366	3	357	..	387
Total	868	21,932	964	22,498	1,065	24,502

Traffic Commission, 1961-1971; Australian Road Safety Council, 1966; Lower Yarra Crossing Authority, 1971

Civil aviation

Control of aviation

The Victorian *Air Navigation Act* 1958 prescribes that control of aviation within the State shall be vested in the Commonwealth. The Air Navigation Act and Regulations in Victoria are consequently administered by the Department of Civil Aviation through its Regional Director in Melbourne.

The functions performed by the Department include the following :

1. the registration and marking of aircraft ;
2. the determination and enforcement of airworthiness requirements for aircraft and the issue of certificates of airworthiness, certificates of type approval, and supervision of aircraft design ;
3. the licensing of pilots, navigators, aircraft radio operators, flight engineers, and aircraft maintenance engineers ;
4. the licensing of airline, aerial work, and charter operators, and supervision of their activities ;
5. the provision and maintenance of aeronautical communications, navigational aids, aerodromes, and landing grounds ;
6. the establishment and operation of air traffic control, aeronautical information, and search and rescue and fire-fighting and rescue services ; and
7. the investigation of aircraft accidents, incidents, and defects.

Aerodromes

Victoria is served by ten Commonwealth Government owned aerodromes at Melbourne (international), Essendon, Moorabbin, Avalon, Bacchus Marsh, Benalla, Echuca, Mallacoota, Mangalore, and Sale and by twenty-four licensed aerodromes at Ararat, Bairnsdale, Ballarat, Birchip, Corryong, Grovedale, Hamilton, Hopetoun, Horsham, Kerang, La Trobe Valley, Mildura, Nhill, Orbost, Portland, Shepparton, St Arnaud, Stawell, Swan Hill, Warracknabeal, Warrnambool, Whittlesea, Wycheproof, and Yarram.

Domestic operations at Melbourne Airport (Tullamarine) commenced on 20 June 1971. The licences of all the licensed aerodromes except

Grovedale and Whittlesea are held by the local government authority. Under the Aerodrome Local Ownership Plan assistance is given to local authorities to maintain licensed aerodromes on a \$1 for \$1 basis. Similar assistance is given the local authority to develop and maintain aerodromes which are or will be served by a regular public transport service. Local authorities which have received developmental assistance include Bairnsdale, Corryong, Horsham, Mildura, Nhill, Portland, Shepparton, Warracknabeal, and Warrnambool. The assistance authorised by the Commonwealth to Victorian local authorities for aerodrome works in the year ending 30 June 1971 was \$10,000 for development and \$79,000 for maintenance works.

In addition to these main aerodromes, there are hundreds of authorised landing grounds which serve the needs of the increasing number of light aircraft users throughout the State.

Private operations

In this category, aircraft are used for the personal purposes of the owner. The extent of this activity within the State may be gauged from the fact that there were 285 aircraft registered in the private category and approximately 3,000 licensed private aeroplane pilots in Victoria at 31 December 1970.

Aerial work operations

Aerial survey, spotting, agricultural operations, advertising, flying training, aerial ambulance operations, and flying for government purposes are examples of the operations included in this category. In terms of hours flown, the most significant operations are agricultural (see page 311) and flying training. In 1970 over 60,000 training hours were flown by training organisations in Victoria. In the interests of encouraging flying for defence and commercial purposes, training organisations receive financial assistance from the Commonwealth. They receive direct assistance in the form of subsidy payments and provision of facilities and indirect assistance through the Australian Flying Scholarship Scheme under which, in 1970-71, sixteen Victorian resident pilots commenced flying training.

Charter operations

These consist of flights for the carriage of passengers or cargo for hire or reward, but which may not be notified to the general public as being operated between fixed terminals or to fixed schedules, or for the carriage of passengers or cargo between fixed terminals to fixed schedules in circumstances in which the accommodation in the aircraft is not available to members of the public. During the 1950s most charter operations were conducted in single engine aircraft, but there is now an increasing use of the modern small twin engine "executive" aircraft. At 31 December 1970 there were 98 Victorian based operators licensed to conduct charter operations and flying hours have increased, over a ten year period, from 2,215 in 1960 to over 35,000 in 1970.

Commuter services

Since the Second World War country or feeder air services within Victoria were commenced on different occasions but ceased when they

proved uneconomic. In 1966 the Commonwealth Government decided a new attempt should be made to provide this type of air service between the capital and numerous country centres. As it was felt charter operators would be prevented by the Air Navigation Regulations from operating to a fixed schedule, it was decided to grant certain exemptions under the Regulations. A charter operator who met appropriate additional requirements and standards would be permitted to operate air services between centres to a fixed schedule and on a regular basis.

By October 1967 exemptions under the regulations had been granted to three operators. Using single and light twin engined aircraft capable of carrying six to thirteen passengers, these operators were approved to operate services to Stawell, Ararat, Ballarat, Kerang, Swan Hill, Echuca, Shepparton, La Trobe Valley, West Sale, and Bairnsdale, and to the interstate centres of Albury and Merimbula. Some of these services commenced in November 1967 and others followed with varying degrees of success and continuity. At May 1971 commuter services of the type in question were operating between the following centres on a regular basis : Essendon-Sale, Essendon-Swan Hill, and Essendon-Merimbula on a seasonal basis.

Melbourne (Tullamarine) Airport

The Tullamarine site of 5,300 acres was chosen for the development of Melbourne Airport when Essendon could not be further enlarged. The completed aerodrome is $12\frac{1}{2}$ miles from the G.P.O. and $4\frac{1}{2}$ miles from Essendon Airport, and is accessible by a new freeway.

The $9\frac{1}{2}$ miles of runways and taxiways were completed early in 1968. The north-south runway (8,500 ft) and the east-west runway (7,500 ft) are both designed for the operation of modern jet aircraft. They are 58 inches thick, and are capable of taking the weight of the Boeing 747 ("Jumbo" jet) and supersonic aircraft. High speed turnouts have been provided to both runways which allow aircraft to turn off the runway at 60 mph. The north-south runway is being extended to 12,000 ft and is expected to be completed in 1972. There is a provision for future development of the east-west runway to extend to 9,000 ft and for a second set of parallel runways.

The present parking "aprons" provide positions adjacent to the terminal building for eight international aircraft and ten aircraft for each of the domestic airlines ; a total of 28 aircraft positions. The full planned development of the passenger terminal aprons would accommodate 16 international and 60 domestic aircraft.

The terminal has three storeys, with a central international section and two adjoining sections for the domestic airlines. The ground floor caters for passenger arrivals, the first floor for passenger departures, and the second floor accommodates airline offices, pilot briefing and operations centre, main restaurants and cocktail lounges and reception rooms. Observation decks are provided overlooking the apron area.

Each terminal has a concourse extending on to the apron area, providing a covered link between the terminal and the aircraft parking positions. The aircraft are positioned "nose in" to the concourse, and passengers embark or disembark via an adjustable aerobridge connecting the aircraft door to the concourse.

An elevated road 520 yards long runs along the face of the terminal at first floor level. It gives departing passengers direct access to the departure lounge, and facilitates the movement of passengers by separating the two streams of traffic.

Instrument landing systems are provided for approaches from the north and east enabling an aircraft to land with a cloud base of 200 ft, and visibility of half a mile. Other navigation aids are long range and approach radars, distance measuring equipment, radio locator beacons, and visual approach lights. The control tower cabin is 150 ft above ground level and enables complete visual observation of the airport and its surroundings. International air services commenced from the airport in July 1970 with domestic services following in June 1971.

Domestic passenger movements, which represent the total of embarkations and disembarkations, for 1970 for each Victorian aerodrome served by a regular service were as follows :

VICTORIA—PASSENGER MOVEMENTS, 1970

Airport	Passenger movements	Airport	Passenger movements
Essendon	2,699,013	Warrnambool	5,352
Portland	4,754	Hamilton	8,218
Mildura	14,570		

Gliding clubs

Gliding is carried out mainly by clubs which operate at Bacchus Marsh, Benalla, Colac, Horsham, and Mildura. A Commonwealth subsidy is granted to clubs through the Gliding Federation of Australia.

Air traffic control

Control of air traffic is maintained by the Department of Civil Aviation through its Air Traffic Control Organisation. This includes the closely co-ordinated sections of operational control which concerns each individual flight, airport control which applies to all movements on or within 20 miles of an aerodrome, and area control which controls aircraft along the main air routes to ensure collision avoidance. In conjunction with air traffic control, the Department maintains a wide range of air navigation aids and a comprehensive search and rescue organisation. This is described in detail on pages 773-6 of the *Victorian Year Book* 1965.

Aircraft parts and materials

There are about 142 organisations in Victoria which have been approved by the Department of Civil Aviation to distribute aircraft parts, materials, and fuel.

Civil aviation statistics

The following table shows particulars for 1970 of regular interstate and intrastate air services terminating in Victoria :

**VICTORIA—REGULAR INTERSTATE AND INTRASTATE AIR
SERVICES TERMINATING IN VICTORIA, 1970**

Particulars		Interstate	Intrastate	Total
Miles flown	'000	26,665	106	26,771
Paying passengers	'000	2,887	10	2,897
Passenger miles	'000	1,309,506	1,615	1,311,121
Freight—				
Short tons		55,948	30	55,978
Ton miles	'000	25,494	5	25,499
Mail—				
Short tons		4,863	3	4,866
Ton miles	'000	2,466	..	2,466

The first of the following tables deals with aircraft registered and licences issued by the Department of Civil Aviation in Victoria, and the second with details of Essendon Airport activities:

VICTORIA—CIVIL AVIATION

Particulars	1966	1967	1968	1969	1970
Registered aircraft owners	332	370	391	362	435
Registered aircraft	630	742	754	785	807
Student pilot licences	2,574	2,672	2,548	2,559	2,886
Private pilot licences	1,927	2,253	2,510	2,844	3,023
Commercial pilot licences	481	515	613	597	743
Airline pilot licences	501	533	535	824	893
Aircraft maintenance engineer licences	757	864	873	900	909

VICTORIA—ESSENDON AIRPORT

Particulars	1966	1967	1968	1969	1970
Domestic aircraft movements	48,243	49,939	50,066	54,192	58,860
Domestic passengers embarked	890,043	976,779	1,075,898	1,201,469	1,341,985
Domestic passengers disembarked	898,493	984,911	1,069,415	1,229,748	1,357,028
International aircraft movements	1,120	1,036	1,018	1,021	634
Passengers arriving/departing overseas	42,784	48,445	49,277	56,064	34,626

VICTORIA—MELBOURNE (TULLAMARINE) AIRPORT

Particulars	1970 (a)
International aircraft movements	1,531
International passengers embarked	34,271
International passengers disembarked	31,636

(a) International operations transferred from Essendon to Tullamarine from 1 July 1970.

History of civil aviation, 1962; Classification of flying activities, 1964; Radio aids to air navigation in Victoria, 1965; Aerial agricultural operations, 1966; Flying training in Victoria, 1967; Regular public transport, 1968; Commuter services, 1969; Radar development in the Melbourne area, 1971

COMMUNICATIONS

Postmaster-General's Department

In 1837 Mr E. J. Foster, Clerk to the Bench at the Port Phillip Settlement, was officially permitted to act as Postmaster in addition to performing his normal duties. Since then the Postmaster-General's Department in Victoria has progressed from a staff of one and a crude bark hut, to a large administration employing a staff of approximately 31,000 persons located throughout the State. The complexity of modern communications requires specialisation in activities, and, to meet these requirements, the Victorian Administration is divided into six major sectors: Postal Services Division, Engineering Division, Telecommunications Division, Personnel Branch, Supply Branch, and Finance and Accounting Branch. Each of these sectors is further divided for efficient functioning.

At 30 June 1970 there were 334 official and 1,493 non-official post offices, 725 country automatic telephone exchanges, 483 country manual exchanges, and 104 metropolitan automatic exchanges. These offices and installations ensure that departmental services are within the reach of all but the most isolated homes.

To maintain the operating staff at desirable levels, large numbers of trainees are recruited each year. In 1970, 548 technicians-in-training began their five year course, 457 at the departmental training school in Tooronga (Melbourne) and 91 at the Wendouree (Ballarat) school. Their course of training covers theory and laboratory studies in electronics including radio, television, telegraph transmission, and telephony. Trainees showing certain aptitudes during training may be trained further in specialised activities. Fifty-six linesmen-in-training commenced a one year course in 1969 at one of the training schools in Doncaster (Melbourne), Bendigo, or Wendouree. The subjects in their course include practical mathematics, science, applied electricity, magnetism, wood and metal work, aerial construction, conduits, cables, and skill with tools. In the same year, a seven months training course was provided for 105 postal clerks-in-training at the Postal Training School in Melbourne. About one third of the training period was spent under actual working conditions at various post offices.

As well as postal, telephone, and telegraphic services, the Postmaster-General's Department also provides transmitting and other technical facilities for the national broadcasting and television services. The general supervision of broadcasting stations and television stations, however, is vested in the Australian Broadcasting Control Board under the *Broadcasting and Television Act* 1942-1956, while, under the same Act, the Australian Broadcasting Commission controls the activities of the National Broadcasting Service and National Television Service.

The following information mainly describes the branches and divisions of the Australian Post Office that are associated with services directly available to the public.

Post Offices Branch

During 1969-70 new official post office buildings were opened at Altona, Apollo Bay, Caulfield East, Greensborough, Laverton, Mordialloc, Tatura, and Thomastown. Modern and attractive in appearance, yet strictly functional

and planned to meet future needs, they provide facilities for the latest mail handling techniques as well as greatly improved amenities for staff.

District Postal Managers' Seminar

A Seminar of District Postal Managers from all parts of Australia was held in Melbourne between 16 and 20 March 1970. Twenty-one District Postal Managers took part in the course. The theme of the Seminar was "The major objectives of postal service in 1970 and beyond".

Transport Branch

The Transport Branch of the Postal Services Division has a fleet of 639 vehicles and a staff of 432 persons. This figure includes 358 motor drivers who are employed largely on rostered shifts and who transport mails and clear public telephone coin boxes and street letter boxes throughout the metropolitan area. The Branch also provides a pool of sedan cars for authorised departmental staff, and undertakes the movement of bulk equipment, stores, cables, and poles by truck to specified locations.

In some areas, mails are conveyed by private contractors. There are 1,103 of these services in Victoria which operate over a total of 13,266,898 miles, at a cost of \$1.6m per annum. Most of the mail routes operated under private contract serve the more sparsely populated areas of the State.

The vehicles allotted to the Transport Branch form only a part of the total fleet of 4,109 vehicles belonging to the Department in Victoria. A large proportion of this total are vehicles allotted to the Engineering Division, and are stationed at various depots throughout the State. Many have been designed for specific duties, such as the conveyance of large drums of cable, lengthy telephone poles, or for use as mobile cranes. Others are fitted out as mobile workshops. In addition to these vehicles, the Engineering Division also employs 508 major mechanical aids, the majority of which are used for earthmoving activities. Over 1,000 small mobile units are used for various special purposes.

Telecommunications services

These services are the joint responsibility of the Engineering Division and the Telecommunications Division. The Engineering Division provides and maintains the technical facilities for telephone and telegraph services and for the national radio and television networks. It allots frequencies, monitors transmissions, and issues licences for privately operated radio services. The Telecommunications Division makes telephone and telegraph facilities available to the public, orders new services, provides customer advice, issues telephone directories, and deals with other telecommunications administrative matters.

Telephone service

Steady progress is being maintained towards providing a totally automatic telephone network throughout the State. During 1969-70 several new automatic telephone exchanges were brought into service, the largest ones being at Barwon Heads, Corryong, Port Arlington, Seymour, and Woodend.

Subscriber Trunk Dialling (S.T.D.) facilities which enable a telephone

subscriber to dial direct to distant subscribers, without the assistance of a P.M.G. operator, have continued to expand rapidly. During the year ended 30 June 1970, 346 exchanges in Victoria provided 682,373 services with access to S.T.D. Some additional centres to which S.T.D. became available during this time include Bairnsdale, Corryong, Hamilton, Kerang, Kyabram, Seymour, Shepparton, and Swan Hill.

A new type of manual assistance exchange has been installed at Wangarratta at a cost of approximately \$290,000. This modern, manually operated trunk exchange provides facilities for the connection of trunk line calls not available by S.T.D., as well as a centralised information and assistance service for telephone users over an extensive area of north-eastern Victoria. The exchange is "push button" in operation, with network access controlled by common switching equipment. It is the first of its kind in Australia, being the prototype for similar and larger installations planned for other centres, including Lonsdale (Melbourne), Newcastle, and Canberra.

A new type of aluminium public telephone cabinet has been developed, and a contract has been placed for 1,170 of these cabinets. Victoria has been allocated 790 of the new cabinets.

A further step in the decentralisation of meter recording is being undertaken with the introduction of local computing in the District Telephone Office, Sale. An "Odhner" machine is being used on a trial basis and, if successful, the procedure will be extended to the other district offices.

On 11 May 1970 a new District Telephone Office was established when Shepparton reached the status of a full district. The Shepparton District serves 11 official manual exchanges, 21 non-official offices, and over fifty automatic exchanges. The area had previously been administered by the District Telephone Manager at Benalla, with a sales office located in Shepparton.

Cumulative meter for recording votes by telephone

A "cumulative meter", which accumulates pulses from twenty recorded voice relay sets, and displays them as a running total on a single meter, has been developed in the Network Performance Division. The unit provides a telephone voting system at television transmitting station HSV7, and has now been in service there for some time, operating most reliably. Two telephone numbers (each with 20 inlets) are used, one for a "yes" vote, and the other for a "no" vote. Callers are connected to an appropriate recorded announcement, and the running total of calls (meter pulses), are fed via private lines to individual meters at HSV7 studios. Apart from the output relays and meters, the unit is fully electronic, using "resistor-transistor-logic" (RTL) digital integrated circuits. Further use of the cumulative meter facility for other television voting requirements is envisaged in the near future. It could also be used on any recorded voice service, where information about calling rates is required.

Automatic Telex

Automatic Telex is basically similar to S.T.D., but the typewritten message from the teleprinter is communicated instead of the spoken word. During 1969-70 an additional 312 Telex services were connected, bringing the total services in operation to 1,700. Victorian Telex subscribers now

have access to more than 6,430 services in Australia, and to some 100 countries overseas.

"Datel" service

There is now an increasing demand for facilities to transmit digital data for computers over telephone and telegraph lines. Known originally as "Data Transmission", the service is now called "Datel". Questions sent by teleprinter to the computer have to be converted to signals that can be "understood" by the computer. Likewise, answers have to be converted to a form that can be transmitted over the lines provided by the Department. This conversion is performed by a modulator/demodulator unit, known as a "Modem". The data can be sent over the telephone network, over private telephone or telegraph lines providing point to point circuits for the customer's exclusive use, or by means of the Telex network. All lines except those used in the Telex network are suitable for high transmission speeds.

At 30 June 1970, 108 customers were using Datel services via the telephone network, and 35 were using private lines.

Television translators

A television translator is basically a relay or booster station, designed to improve television reception in areas where reception is normally poor. The translator receives programmes from a parent television station, and re-broadcasts them on a new wave-length, and under a new call-sign. Work on a new television translator designed to serve a population of approximately 12,000 in the Nhill area commenced in April 1970. The station, ABRV9, was brought into service on 19 October 1970 with a power of 50 watts. The power was increased to 500 watts in August 1971.

Radio communication systems

During 1969-70 a number of microwave radio systems, forming part of the broadband network in Victoria, were established by the Department in various parts of the State. During September 1969 links were provided between Swan Hill and Terang, Bendigo and Shepparton, and Melbourne and Hughes Creek Hill. Bendigo and Swan Hill were linked in October 1969, and Healesville and Upper Thompson River (for the Melbourne and Metropolitan Board of Works project), Melbourne and Albury, and the Corryong network were all completed in November 1969. Radio links between Morwell and Bairnsdale, Foster and Tidal River, and Melbourne and Ararat (No. 2) were completed in December 1969. A television link was provided between Melbourne and Morwell in February 1970 and radio-telephone links were established between Albury and Corryong in March 1970 and Albury and Dederang in June 1970.

Radio communications

All civil radio communications stations are licensed and controlled by the Radio Branch of the Engineering Division, where rigid technical standards for equipment design and performance are enforced by regular inspection, by monitoring, and by frequent transmission checks.

As a member of the International Telecommunications Union, the Postmaster-General's Department in Australia observes and checks all

radio transmissions received in Australia. Results of these observations are forwarded to the International Frequency Registration Board in Geneva, Switzerland.

The Radio Branch investigates complaints from broadcast listeners and television viewers concerning interference to reception. On behalf of the Department of Shipping and Transport, its staff also inspects the radio installations aboard vessels in the ports of Melbourne and Geelong.

Revenue and expenditure

For the years prior to 1968-69 cash receipts were paid into the Commonwealth Consolidated Revenue Fund. As from 1968-69 cash receipts were paid into the Post Office Trust Account which forms part of the Trust Fund of the Commonwealth. In addition receipt classifications have been reconstituted and cannot be compared with those used previously.

In Victoria for the year 1969-70 cash receipts were \$179.0m. The collections were postal \$45.6m, telephone \$123.5m, telegraph \$3.9m, proceeds of sales \$2.1m, recoverable works \$3.8m, and international services \$0.1m.

As in the case of cash receipts, the new expenditure classifications cannot be compared with those used previously. These were cash payments made for Post Office purposes from the Commonwealth Consolidated Revenue Fund but are now made from the Post Office Trust Account.

In Victoria for the year 1969-70 cash expenditure was \$184.2m, salaries and wages were \$105.4m, materials \$51.0m, carriage of mails by contractors \$2.9m, buildings, sites, properties \$9.5m, accommodation and services \$5.5m, and other \$9.9m.

Statistics

The number of post offices and telephone offices and the number of persons employed by the Postmaster-General's Department in each of the five years 1965-66 to 1969-70 were as follows :

VICTORIA—POST OFFICES, TELEPHONE OFFICES, PERSONS EMPLOYED

Period	Number of post offices	Number of telephone offices	Persons employed					Total
			Permanent	Temporary and exempt	Semi- and non-official postmasters and staffs	Mail contractors	Other (a)	
1965-66	2,094	109	16,160	9,555	2,387	942	813	29,857
1966-67	2,044	91	16,571	9,990	2,341	1,021	812	30,735
1967-68	1,981	77	17,312	9,753	2,267	1,052	791	31,175
1968-69	1,900	63	18,081	9,124	2,159	898	782	31,044
1969-70	1,827	56	18,346	9,429	2,036	984	768	31,563

(a) Includes telephone office-keepers and part-time temporary and exempt employees.

The following table shows the total number and value of money orders and postal notes issued and paid in each of the five years 1965-66 to 1969-70 :

VICTORIA—MONEY ORDERS AND POSTAL ORDERS (a)

Period	Money Orders (b)				Postal Orders			
	Issued		Paid		Issued		Paid	
	Number	Value	Number	Value	Number	Value	Number	Value
	'000	\$'000	'000	\$'000	'000	\$'000	'000	\$'000
1965-66	3,230	107,608	2,980	107,197	3,846	3,863	4,918	4,747
1966-67	3,070	112,445	2,883	111,563	3,239	4,343	4,472	5,147
1967-68	2,763	115,739	2,573	115,197	3,303	5,484	3,410	5,330
1968-69	2,166	47,189	2,086	46,767	3,543	6,925	3,495	6,484
1969-70	1,926	38,931	1,936	37,709	3,808	8,086	3,714	7,277

(a) From 1 June 1966 Postal Orders replaced Postal Notes.

(b) These figures include Official Money Orders used in bringing to account Telephone Account Collections and War Service Homes Repayments. The practice was discontinued towards the end of 1967-68.

Of the money orders issued in 1969-70, 1,792,240 for \$37,824,138 were payable in the Commonwealth of Australia and 134,115 for \$1,106,786 in other countries. The orders paid included 1,881,773 for \$36,636,164 issued in the Commonwealth, and 53,958 for \$1,072,549 in other countries.

Particulars relating to the number of letters, etc., posted and received within Victoria during the years 1965-66 to 1969-70 are as follows :

VICTORIA—LETTERS, ETC., POSTED AND RECEIVED
('000)

Period	Letters, postcards, etc.	Registered articles (except parcels)	Newspapers and packets	Parcels (including those registered)
POSTED FOR DELIVERY WITHIN THE COMMONWEALTH				
1965-66	577,379	2,414	99,611	4,943
1966-67	604,213	2,475	104,711	5,168
1967-68	580,820	2,385	100,854	5,531
1968-69	575,773	2,307	100,878	5,473
1969-70	559,138	2,262	94,188	5,652
DISPATCHED TO AND RECEIVED FROM PLACES BEYOND THE COMMONWEALTH				
1965-66	76,393	1,062	16,102	625
1966-67	82,866	1,087	16,137	672
1967-68	83,387	1,151	15,447	705
1968-69	91,724	1,171	14,372	734
1969-70	77,142	1,249	13,860	792
TOTAL POSTED AND RECEIVED				
1965-66	653,773	3,476	115,714	5,568
1966-67	687,079	3,562	120,848	5,840
1967-68	664,207	3,536	116,301	6,236
1968-69	667,497	3,478	115,250	6,207
1969-70	636,280	3,511	104,048	6,444

The number of radio communication stations authorised in Victoria at 30 June in each of the years 1966 to 1970 is shown in the following table. Figures relate to radio communication (radio-telegraph and radio-telephone) stations only.

VICTORIA—RADIO COMMUNICATION STATIONS AUTHORISED

Class of station	1965-66	1966-67	1967-68	1968-69	1969-70
Transmitting and receiving—					
Fixed stations (a)—					
Aeronautical	4	4	4	4	4
Services with other countries	13	12	12	12	12
Other	241	216	223	226	262
Land stations (b)—					
Aeronautical	23	27	28	24	49
Base stations—					
Land mobile services	1,279	1,453	1,527	1,693	2,066
Harbour mobile services	22	21	22	23	31
Coast (c)	15	16	16	20	25
Special experimental	150	141	143	153	169
Mobile stations (d)—					
Aeronautical	362	422	449	437	512
Land mobile services	14,655	16,633	17,795	20,225	25,005
Harbour mobile services	150	159	163	178	257
Ships	473	526	626	728	914
Amateur stations	1,567	1,648	1,723	1,785	1,925
Total transmitting and receiving	18,954	21,278	22,731	25,508	31,231
Receiving only—					
Fixed stations (a)	198	197	198	199	198
Grand total	19,152	21,475	22,929	25,707	31,429

(a) Stations established at fixed locations for communication with other stations similarly established.

(b) Stations established at fixed locations for communication with mobile stations.

(c) Land stations for communication with ocean-going vessels.

(d) Equipment installed in motor vehicles and harbour vessels.

Information relating to the telephone service at the end of the years 1965-66 to 1969-70 is given below :

VICTORIA—TELEPHONE SERVICES

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Telephone exchanges	1,565	1,506	1,425	1,353	1,312
Public telephones	7,292	7,344	7,373	7,463	7,505
Services in operation	660,974	693,134	727,575	770,162	824,227
Instruments connected	904,925	957,668	1,019,603	1,080,223	1,182,149
Instruments per 1,000 of population	281.2	292.7	306.7	319.2	343.3

Broadcast and television licences in force

The number of stations licensed for broadcasting and television, and the number of holders of broadcast listeners' and television viewers' licences in Victoria at the end of the years 1965-66 to 1969-70 are shown in the following table:

**VICTORIA—NUMBER OF BROADCASTING AND TELEVISION
LICENCES IN FORCE**

Class of licence	1965-66	1966-67	1967-68	1968-69	1969-70
Broadcasting station (a)	20	20	20	20	20
Television station (b)	9	9	9	9	9
Broadcast receiver	141,639	114,778	94,982	80,685	72,051
Television receiver	87,640	92,822	96,789	73,078	107,362
Combined broadcast and television receiver	574,955	598,035	629,729	647,814	675,457
Amateur	1,567	1,648	1,723	1,785	1,925

(a) Excluding eight broadcasting stations (including three shortwave) operated by the National Broadcasting Service.

(b) Excluding eight television stations operated by the National Television Service.

Overseas Telecommunications Commission

The Overseas Telecommunications Commission (Australia) is the authority responsible for Australia's external telecommunication services by cable and radio.

The Commission was established in August 1946 under the Overseas Telecommunications Act. This Act implemented, in Australia, a recommendation of the 1945 Commonwealth Telecommunications Conference for national ownership of the external telecommunication services of the British Commonwealth countries concerned and for establishment of a representative advisory board, the Commonwealth Telecommunications Board, to co-ordinate their development.

The Commission provides telegraph, telex, phototelegraph, and, in conjunction with the Postmaster-General's Department, telephone services with overseas countries and Australian territories. Leased one-way and two-way circuits are also provided for large commercial users. In addition, it operates the Australian coastal radio services for communication with ships at sea in Australian waters and high frequency radio services in communication with ships in any part of the world. The Commission's coastal radio stations also provide certain services to a number of remote stations within Australia and its territories.

Further details of the Commission's activities may be found in the *Commonwealth Year Book*.

Appendix A

SALE

History

Initial exploration from the Monaro

Sale is situated on the original track opened by the Gippsland explorer, Angus McMillan, between 1839 and 1841. He travelled across the Monaro High Plains to James Macalister's outpost station at Omeo, and from there was encouraged to explore further south for new grazing land after a severe drought during 1838. McMillan made three attempts before he reached Port Albert; he first established a station named Numblamungie at Ensay on the Tambo River; then in January 1840 he followed the Tambo to what is now Bruthen. Later that year, McMillan undertook his most difficult journey to reach the sea, having to cross the Nicholson, Mitchell, Avon, and Macalister Rivers before he arrived at Port Albert. During these years, between 1839 and 1841, the Polish scientist and explorer, Count Paul de Strzelecki made another, more publicised journey from the Australian Alps to Wilsons Promontory, and accounts of this journey aroused popular interest in Melbourne and Sydney about the whole of the newly explored Gippsland region.

Port Albert

Stations were rapidly established along the Tambo and La Trobe Rivers after 1840 by settlers who followed the tracks of McMillan and Strzelecki. The settlement of Port Albert and the Lakes region expanded after the accidental discovery of a deep water port at Port Albert in 1841. The Gippsland Company was formed to organise local development and shipping from Melbourne; supplies, mail, and passengers were transferred from boat to packhorse at Port Albert and laboriously travelled along rough tracks through dense bush to the new settlement of Flooding Creek (later Sale). Port Albert continued its important role in Gippsland, even after a serviceable road between Sale and Melbourne was completed during the gold rush. Cattle, timber, skins, wool, tallow, and other goods were sent to Van Diemen's Land and Melbourne, while the port also served thousands of men bound for the gold mines in the ranges north-west of Sale.

Beginnings of Sale (Flooding Creek)

The fertile district situated between the La Trobe and Avon Rivers, called Flooding Creek, attracted settlers to establish sheep and cattle runs.

Among the first was Archibald McIntosh who built a blacksmith's shop on the bank above Flooding Creek in 1844 and attracted other settlement around him, including a wattle and daub store and the roughly built Woolpack Inn. The site was surveyed in 1848 by Penrose Nevins and was named after Sir Robert Sale, a military hero of Jellalabad in Afghanistan. The first permanent Anglican priest in the district, the Rev. Willoughby Bean, recorded that the population at that time was 111 persons, including those at The Heart and Clydebank runs. However, before the discovery of gold in 1854, the population was largely scattered among small holdings, with the newly planned Sale serving as a centre for supplies, mail, and news.

Gold and its effects

The first discoveries of gold deposits at Omeo in 1854 aided the growth of Sale, but this was overshadowed by developments in Bairnsdale. However, gold was also discovered along the Jordan River in 1862 and the miners opened two tracks from Stratford and Sale. A party from Stratford was the first to reach the diggings. Headed by Percy Lloyd, the group followed the Macalister River, crossed Connor's Plains to the junction of the Goulburn River, climbed Mt Matlock, and then descended to the Jordan River and Jericho. They sold their supplies at prices below those of the merchants from Jamieson in north-east Victoria, and returned to Stratford with further orders.

However, the £50 reward for discovering a viable route to the Jordan goldfields was won by McEvoy and his party whose track followed the spurs between Glenmaggie Creek and the Thomson River. This track had the advantage of avoiding river crossings which were serious obstacles for loaded packhorses. McEvoy's Track was subsequently used as the main route to the goldfields.

The gold rush also encouraged building of the important road link between Melbourne and Sale. Local pressure for a government surveyed road became insistent after gold was discovered at Omeo in 1854 and a rough road was cut under sectional contracting from Melbourne to Sale, to Port Albert and to Bairnsdale between 1857 and 1865. Even after bridges were constructed over the La Trobe and Moe Rivers in the most difficult region between Moe and Bunyip, the coach journey from Melbourne to Sale took 68 hours.

Before the discovery of gold, coin was scarce in Sale; bush wages were paid by order on Turnbull and Howden's store in Port Albert, and the charge for cashing was 5 per cent. Although there were banks in Sale, the order system continued and token coins issued by private firms were also circulated. However, the gold discoveries on the Jordan River in 1862 rapidly altered financial conditions in the Sale district. The weekly steamers, *Keera* and *Murray*, mostly carrying passengers bound for the goldfields, caused an influx of ready cash and the order and token systems disappeared.

Gold brought prosperity to Sale during the 1860s. Grain growers expanded their production; quantities of wheat, oats, and barley were grown in the Avon area, on the Sale Plains, and at Maffra and Tinamba. McEvoy's Track was used for driving fat cattle to Jericho from as far as Omeo and Sale. Cattle were also driven as far as Woods Point to supply Walhalla, the Fulton's, Jordan River, and Aberfeldy goldfields. This supply line captured further markets for Sale traders from dealers in the north at Jamieson.

The discovery of gold at Omeo in 1854 not only encouraged a general increase of population throughout Gippsland in the following two decades, but also established more permanent residence in the major towns. The overall population grew from 1,220 in 1846 to 6,214, excluding Aborigines and Chinese, in 1861. Sale itself had about 300 residents by 1856 at the beginning of the gold rush, and the population expanded to over 4,000 in 1863 when Sale was constituted a borough. This increase in the population of squatters and goldseekers had its effects on the Aborigines in the Sale region. Their numbers rapidly decreased after contact with Europeans as a result of disease, antagonistic settlers, social isolation, and the general undermining of their culture. This decline resulted in the establishment of Lake Tyers in 1862 as an attempt to settle the Aborigines and to encourage their independent subsistence. However, there was little understanding of the dying Aboriginal culture nor new employment to prevent their social and economic impoverishment.

The population influx during the gold rush also caused many problems after gold profits declined for individual miners. These were apparent in increased demand for land and a lack of employment in new towns like Sale. However, Grant's *Land Act* 1869 permitted free selection of 320-acre blocks, and the growing road and rail-building projects encouraged new employment around Sale.

Growth of Seaton

Bald Hill or Seaton, as it is now known, lies at the foot of the Great Dividing Range. It expanded to become an important town and outgrew Sale during the gold era. But this growth was short-lived and only a few houses and a deserted school remain. Supplies were shipped from Melbourne to Sale, then sent by wagon to Seaton and finally carried by packhorse along McEvoy's Track to the goldfields. The high prices paid by the miners at Jericho are indicated by the usual cost of the following basic requirements: flour was £5 a bag, tea 4s a pound, sugar and salt 1s a pound, picks 9s and shovels 14s each. Transport from Melbourne to the Jericho goldfields was also expensive, but it was possible to leave Melbourne by steamer at 11 a.m. and reach Seaton by coach from Port Albert or Sale at nightfall the following day. The passage to Port Albert cost 7s 6d steerage or 45s cabin class. The coach journey from Port Albert cost 20s to Sale or 30s to Seaton, with the additional journey to Jericho being a further transport expense. Eventually, the Government cleared and gravelled McEvoy's Track and hostelrys and grog shanties sprang up. The advantages of the track are reflected in the price of flour alone which cost £10 a bag at Jericho if supplied from Jamieson, but only £5 when brought from Sale. McEvoy's Track is still used as a road to bring timber from the hills. The discovery of gold in the Gippsland hills consequently reduced the number of workers prepared to work on squatters' properties so that wages had to be doubled or increased, sometimes to £1 a day to attract labourers. However, with the influx of thousands of miners to Omeo or the Jordan goldfields, the consumer population increased and most squatters and merchants prospered.

Steamers

Following the establishment of Port Albert by the Gippsland Company during the 1840s, exploration of the coast revealed an entrance to the Lakes in 1851. This entrance proved unreliable, but another passage was

found in 1854 at Red Bluff, a few miles to the west. In 1858 the first Gippsland steamer, the *Enterprise* of 63 tons, was built at Sale. The possibilities of lake navigation became obvious as towns were established on the Gippsland rivers; Sale being near the La Trobe River, Bairnsdale on the Mitchell, and Mossieface and Ensay on the Tambo. In 1864 the Gippsland Lakes Navigation Company was formed and in that year the Company inaugurated the first direct steamer service between the Lakes and Melbourne with a Scottish built paddle steamer, the *Charles Edward*, of 185 tons. Boats began delivering goods at Clydebank on Lake Wellington because the mouth of the La Trobe River at Sale was too shallow for early navigation. As navigation of the La Trobe River improved, vessels were able to sail to the toll bridge which had replaced the punt across the La Trobe. The La Trobe Wharf was then built and required a three mile, solid road to be built across a swamp to Sale.

Steamers were widely used for transporting goods and raw materials between Melbourne and Sale. Red gum was carried through the Lakes for Melbourne's street blocks and grey box was sent to the city for building drains. Hides and wattle bark were also sent to Melbourne and the steamers returned loaded with miners for the diggings and various stores and coal for Sale.

Work on the railway from Melbourne was nearing completion in 1877. Gangs worked from both ends of the line, and sleepers, rails, and rolling stock were brought by steamer through the Lakes from Melbourne to Sale; the first engine for the Sale railway was carried aboard the ketch *Warhawk*, and lines were laid to the wharf for the landing. When the railway line was completed, passengers travelled from Melbourne by train and left Sale by boat bound for holidays in Paynesville, Bairnsdale, Rosherville (now Metung), and Lakes Entrance. During the 1880s the Sale district reflected Victoria's prosperity. In Sale, bigger and better buildings appeared; the number of banks grew to eight; and the railways were extended. Improved boats were needed on the Lakes for cruising, fishing, and shooting. The La Trobe Wharf, with two hotels, the Swan and the Victoria, was a busy centre for many years, but the building of the Sale swing bridge in 1883 over the La Trobe River allowed boats to berth nearer the town at The Willows, where cargo was discharged until the mile-long Sale Canal was built in 1883. The construction of a new wharf on Flooding Creek, and the building of the railway on the west side of Raymond Street, effectively transferred Sale's business centre from Foster Street to Raymond Street. However, in time, the river men who had based their plans on the rivers and lakes were proven wrong. The Gippsland Lakes trade collapsed after the completion of the railway to Bairnsdale. The land boom of the 1880s was over, and the railway cut short the steamer era.

Twentieth century development

During the twentieth century Sale has developed as the centre of a predominantly agricultural and pastoral region. The dairy industry, as well as beef cattle and pastoral production, have brought prosperity to the district and encouraged local agricultural processing industries. A butter factory was first established on the Stratford Road in 1894 and moved to its present site in 1917. The Newnham family originally began their bacon factory near Longford in 1885 and subsequently transferred this business

to Sale. A flour mill was established by Mr Peter Eckhart in an old mill early this century. During the First World War 14,000 bags were exported annually to Britain. Due to this increased business, a railway siding was built at the mill, which was eventually closed in 1960. A flax mill was built at Wurruk, one mile west of Sale in 1920 to process promising yields of flax, but as an industry the project was unsuccessful. The Gippsland Woollen Mill in McGhee Street Sale met a similar fate after its optimistic commencement in 1935.

Generally speaking, industry in Sale has developed largely in response to local agricultural demands. Lacey's engineering firm is one example, being a business that began a century ago as a small blacksmith's shop. The firm progressed from horses to ships and farm machinery, and now has an engineering works, foundry, and separate section dealing with farm equipment. The discovery of oil and natural gas has had the most significant effect on the population and prosperity of Sale since the early gold days. The processing plant at Longford, twelve miles to the south, has brought an influx of new residents to Sale since 1965, which has consequently placed new demands on education, shopping, and housing facilities.

Avon Shire

The Nuntin run, on the southern banks of the Avon River, 10 miles north of Sale, was abandoned by Angus McMillan in 1842, when he was attacked by Aborigines. It was resumed by Archibald McIntosh, who abandoned it when the Avon River flooded much of his land and eventually settled at Flooding Creek. Meanwhile, Nuntin was settled by William O'Dell Raymond, a grazier from New South Wales, who also occupied the Strathfieldsaye run on the northern shores of Lake Wellington, into which the Avon and La Trobe Rivers flow. During the first years Raymond left Strathfieldsaye in the charge of an overseer, but he later returned and built the homestead of Strathfieldsaye in 1848. This is believed to be the oldest continuously occupied homestead in Gippsland. While concentrating on the Nuntin run during its early years, Raymond crossed the river Avon, named by McMillan after the Avon River in his native Scotland, and built what was to be the first house in Stratford, the Shakespeare Hotel. The first church services were held at the Shakespeare. The first store in Stratford was opened in 1856 and was soon followed by a flour mill and a tannery. However, Stratford only really developed importance in the gold rushes of the 1860s, and in 1865 was declared the principal town of the new Avon Shire. Maffra was originally part of the Avon Shire, but was severed in 1875. Dargo was annexed in 1885, along with Crooked River and Grant which, as a goldfield in 1860, boasted 1,270 residents with twenty-three hotels and fourteen general stores.

The Lakes Navigation steamers used to sail up the Avon River as far as Red Banks, a mile or so from the township, until competition from the railways which reached Stratford in 1885, put an end to river trade. The unpredictable Avon River has frequently endangered Stratford. However, the Avon River Improvement Trust was formed in 1951, and the present bridge—the fourth built since the river was first spanned in 1854—was opened in 1965. In the twentieth century Stratford's economic development has been slow. However, sheep grazing, dairying, and beef cattle raising are now well established in the Stratford district. Lake Glenmaggie provides

irrigation water for 26,000 acres and artesian water is available in the Meerlieu and Clydebank areas. Soldier settlement blocks have subsequently been opened at Llowalong, Airly, and Cobains after the First and Second World Wars.

Some industries have been established in the Avon Shire to process local natural resources. Two thirds of the Shire contains valuable hardwood forests and this has encouraged a profitable timber industry, while the Australian Paper Mills has established 15,000 acres of pine plantations which have been planted on a sustained yield basis and have now matured to a state of utilisation. Another industry manufactures concrete pipes from local sand and gravel.

During the Second World War the Commonwealth acquired two blocks of land in the Avon Shire. One at Strathfieldsaye became a bombing range for the R.A.A.F., and the other, at The Heart, near Sale, is the East Sale R.A.A.F. base. The East Sale base has continued as a training centre since the Second World War.

Maffra Shire

When Angus McMillan settled at Bushy Park, on the banks of the Avon River, other graziers followed from New South Wales to fatten their stock on the richer pastures of Gippsland. One of them was William Bradley, a veteran of the Peninsular War, and it is believed that he, retaining pleasant memories of the Portuguese town of Mafra, named his Gippsland run accordingly. The district had been created in 1864, as part of the Avon Shire, but Maffra was established as an independent shire in 1875. By this time Maffra itself was a centre for trade, as it was situated on the tracks to the gold rushes at Dargo and the Freestone and Gladstone creeks.

Features of the Shire are vast tracks of forest land to the north on the southern slopes of the Dividing Range which provide a large timber industry and scenic attractions for tourists and campers. Fertile river flats support 700 dairy farmers while undulating foothill country provides rich pasture for beef cattle. Tracts of irrigated land grow tomatoes, fodder crops, and market vegetables, and the town has two milk and cream condenseries. Maffra is a spaciouly planned town with lawns and gardens dividing the principal service roads. New civic chambers were built in 1964, and other public buildings are a municipal library, kindergarten, welfare centre, and 39 bed general hospital. Education is provided in Maffra by State primary and secondary schools and a convent school, while a consolidated area school is established at Boisdale.

Rosedale Shire

The Rosedale Shire centenary in 1971 commemorated the Shire's foundation in 1871 and the boundaries which were originally established in 1892 have since been maintained. Rosedale is an interesting area which has its origins in the first pastoral development of Gippsland. It was an important gold route from Port Albert to Walhalla, the district police headquarters during the gold rush, and a trading centre for a prosperous pastoral area. Grazing and dairying on the rich flats of the La Trobe River, Flynn's Creek, and Merrimans Creek are the most important agricultural pursuits. However, new farms have been established since the Second World War and soldier settlement farms of 100 acres are found in the

Nambrook-Denison Irrigation Area. Another recent project is Dutson Downs, a farm of 12,000 acres established in 1957 by the La Trobe Valley Water and Sewerage Board. Dutson Downs provides disposal of domestic and industrial waste in the La Trobe Valley to irrigate pasture for sheep and cattle grazing. The two secondary industries in the Shire are a pineboard factory at Rosedale and the gas processing and crude stabilisation plant at Longford. Australian Paper Mills has established pine plantations on previously barren, sandy soil which supply the Maryvale Paper Mill and the Rosedale pineboard factory established in 1957. Rosedale Shire has also felt the effects of the tourist industry. By 1970 land development companies had bought and subdivided coastal areas along the Ninety Mile Beach and Lake Victoria into over 15,000 lots, and numerous holiday homes are being built.

Climate

The average annual rainfall at Sale is 24 inches. This is less than other areas of Gippsland to the east and to the west because of the rain shadow of hills and mountains to the north-west and south-west of Sale. Annual totals have varied from 13.27 inches in 1908 to 37.14 inches in 1952. The rainfall is evenly distributed through the year, but monthly totals can vary considerably. The wettest month was May 1879 when 9 inches fell, while there have been two rainless months, February 1914 and February 1968.

The mean maximum temperature in summer is 77°F., and the temperature reaches 90°F. on an average of 18 days a year. Summer nights are mild with a mean minimum temperature of 54°F. In winter the mean maximum temperature is 56°F., which is similar to most of Victoria, but winter nights are cold, with a mean minimum temperature of 38°F. Heavy frosts (screen temperature 32°F. or less) occur on an average of 15 nights a year, and light frosts (screen temperature between 32°F. and 36°F.) on an average of 24 nights a year. However, the day after a frost is usually bright and clear. Hours of sunshine range from a daily average of 8 hours in January to 4 hours in June.

The low-lying land around Sale is subject to overnight and morning fog. At East Sale fog occurs on an average of 67 days a year, varying from 8 days in June to 3 days in December. The prevailing wind direction is westerly, except on summer afternoons when there is frequently a sea breeze from the east to south-east. Strong winds are infrequent, the mean wind speed exceeds 25 mph for only 2.5 per cent of the time. The highest wind gust recorded at Sale is 81 mph.

Geography

The local government areas of Avon, Maffra, Rosedale, and Sale cover a total area of 3,750 square miles in the south-eastern region of Victoria, south of the Great Dividing Range. The area includes a great variety of land formations, with the northern boundary being the Divide itself. It ranges from natural hardwood forest country, scrub covered foothills, fertile lowlands, alluvial plain, lake country, and marshlands, to the sand dunes which border the Ninety Mile Beach. The area is drained by four major river systems—the La Trobe, Thomson, Avon, and Macalister—each of which rises in the alpine highlands and finally discharges into the Gippsland Lakes, a unique lacustrine system which extends parallel to the sea coast for nearly fifty miles, with an artificial entrance to the ocean at Lakes

Entrance in the extreme east of the area. The whole of the Gippsland Lakes has been formed by progressive wind and ocean current action resulting in the formation of long sand dune areas, which have ultimately enclosed large sections of low-lying shallow seas. Before the construction of an artificial entrance, the lake system formed its own outlet only after severe flooding of the major rivers.

The vast natural hardwood forests of the higher country have given rise to the establishment of a major timber industry centred at Heyfield, from where some 26 million super feet are transported each year. More recently, many thousands of acres of introduced pine forest in the Longford-Rosedale districts have supplied softwoods for both particle board and paper production. Geological surveys are continually disclosing new areas of important minerals, notably iron, copper, chromite, tin, and antimony. Following the locating and production of offshore natural gas and oil in great commercial quantities, further test boring is continuing within the confines of the Lakes area.

Geology

The Sale landscape is conspicuously flat, being composed of slightly elevated alluvial terraces built up by the ancestral Thomson River during Upper Pleistocene time. These terraces extend north-easterly to the Avon River, and link with similar terraces adjacent to the La Trobe River, into which the Thomson River flows a little to the south. The elevated terraces reach eastwards to Lake Wellington, near which they are veneered by some small wind-blown sand deposits. The terraces themselves, composed of silts, clays, and minor sands and gravels, form rich soils for agriculture.

Lower river flats which are subject to flooding adjoin both the Thomson and La Trobe Rivers. South of the La Trobe River at Longford, a river terrace, more elevated than the one on which Sale is built, lies behind the flood plain of the river and a narrow terrace correlating with the Sale raised terrace. This more elevated terrace, of probable Middle Pleistocene age, correlates with similar high terraces north-east of the Avon River nearby and west of Stratford on the Avon-Macalister divide.

Low hills are found west of Sale, commencing at Wurruk Wurruk where a low ridge extending westwards forms the divide between the Thomson River and the La Trobe. The ridge is made of an older deposit, alluvial in origin, of sands, clays, and gravels belonging to the Haunted Hill Gravels (Upper Pliocene-Lower Pleistocene). More conspicuous hills form a scarp known as the Rosedale Monocline immediately to the south of the La Trobe River near Longford, and extending westwards to Rosedale. The Rosedale Monocline is a late Tertiary flexure, and dominates the sub-surface geology. On its southern side up-warping has occurred, and the Lower Miocene marine Longford Limestone outcrops from beneath superficial Haunted Hill Gravels. North of the Rosedale Monocline is the low-lying flood plain of the La Trobe River and further north the elevated terrace of Sale. Pronounced down-warping has occurred north of the Monocline, so that at Sale, the Longford Limestone, instead of outcropping, is about 1,000 ft below ground level.

South of the Rosedale Monocline between Longford and Merrimans Creek the Tertiary deposits have been arched upwards into an anticlinal structure known as the Baragwanath Anticline. The Longford Limestone is

found only on the flanks of this Anticline, at Longford and at Merrimans Creek, and at both places is quarried for cement manufacture. On the main portion of the Anticline, the Longford Limestone has been removed by erosion, and the older sediments of the La Trobe Valley Coal Measures (Eocene) are concealed beneath thin Haunted Hill Gravels. Figure 12 describes the structure.

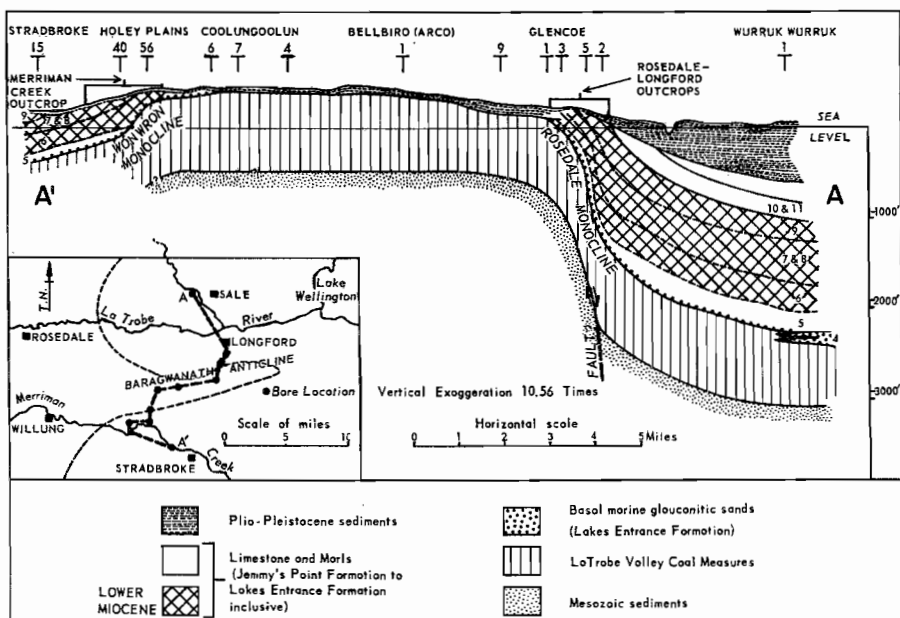


FIGURE 12. Oblique section across the Baragwanath Anticline showing the structural altitude and outcrop positions of the lower Miocene calcareous deposits. Correlation within the limestones and marls is by Carter's Faunal Units (numbered 4 to 11). [From Hocking, 1970.]

At Sale itself, more than 3,000 ft of Tertiary and Quaternary marine and fresh water sediments overlie a basin floor of Mesozoic rocks. South of the Rosedale Monocline, the Mesozoic basement is only about 1,000 ft deep. The Tertiary-Quaternary basin extends northwards to the foothills of the Eastern Highlands, and at Briagolong, close to its margin, it contains only 325 ft of Tertiary-Quaternary sediments, now entirely non-marine.

The Tertiary-Quaternary deposits of Sale are revealed by the Bore No. 1, Parish of Wurruk Wurruk, situated about one mile west of Sale. This bore has been studied by Hocking (1970) and Jenkin (1968). Tertiary sediments begin with 700 ft of brown coals, sands, and clays belonging to the fluviatile and swamp deposits of the La Trobe Valley Coal Measures (Eocene), which rest upon Mesozoic felspathic sandstones at 3,100 ft depth. Greensands of the Lakes Entrance Formation (Oligocene) indicate the inundation by the sea, and the commencement of 1,700 ft of marine sedimentation which continued without break into the Upper Miocene. The Lakes Entrance Formation is overlain by the thick Gippsland Limestone—limestones and marls—of which the Longford Limestone forms one unit, and the whole marine sequence is well dated by foraminifera. The marine succession terminates with about 100 ft of fossiliferous sandy marl, marls, and minor limestones of the Lower Pliocene Jemmys Point Formation.

Recession of the sea is indicated by the overlying fresh water and lagoonal sands, clays, ligneous bands, and gravels of the Boisdale Beds (Pliocene).

At Sale, the Boisdale Beds are 45 ft deep, and have a thickness of about 650 ft. They form an important aquifer. Recent Mines Department investigation has located abundant good quality water in this formation, with water of 380 parts per million of total dissolved salts flowing from bores, with a hydrostatic head of 40 ft above ground level. This water is from the depths of 200–400 ft and will be used for Sale's town supply; three bores drilled can yield more than two million gallons per day.

The uppermost beds in the City of Sale are the old river terrace materials mentioned earlier, and consist of silts, clays, sands, and minor gravels, of about 45 ft thickness.

Macalister Irrigation District

Gippsland is famous for its dairy herds, so it is not surprising that the Macalister Irrigation District concentrates on pasture crops. As the largest irrigation area south of the Great Divide, it encircles the Macalister River from Lake Glenmaggie to Sale, and extends over 130,000 acres. The main source of irrigation water is the 154,000 acre ft Lake Glenmaggie, although diversions are also made from the Thomson River at Cowwarr Weir. The Macalister Irrigation District extends from a point seven miles south-west of Heyfield eastward for about 22 miles to the East Sale R.A.A.F. Base. (The most northerly point is adjacent to Valencia Creek, and the southernmost is one mile south of the Princes Highway at Kilmany.) There are approximately 920 farms within the District, in which 84,000 acres are classed as suitable for irrigation.

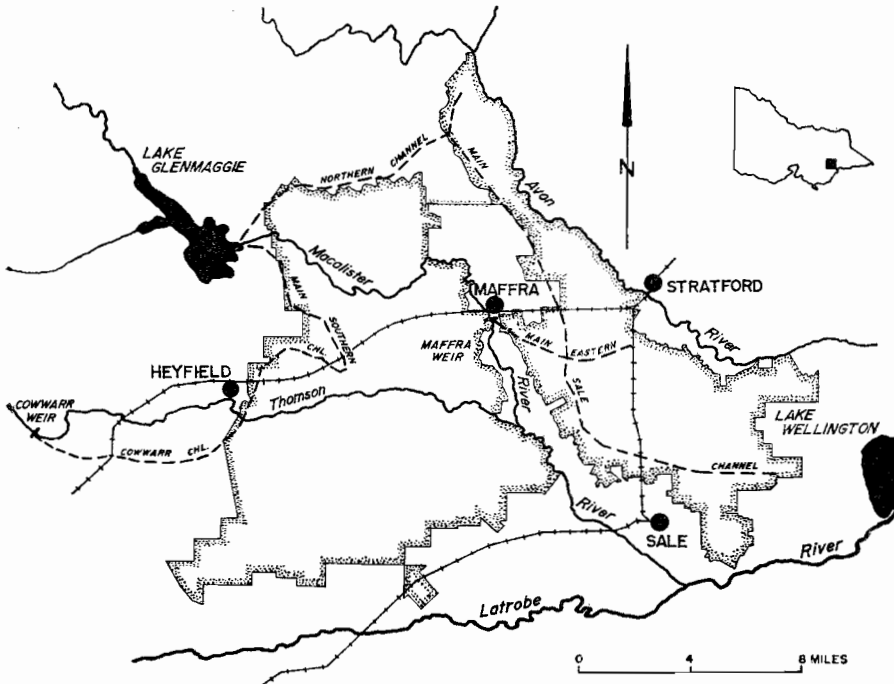


FIGURE 13. Macalister Irrigation District.

Most of Gippsland has an annual rainfall of approximately 30 inches ; the Macalister area, however, is in a rain shadow, so that irrigation is necessary. This district is overshadowed by the Baw Baw Plateau, the Haunted Hills near Yallourn, and the Strzelecki Ranges, giving an annual average rainfall at Maffra of only 23.5 inches. The first requests for irrigation came from farmers along the Macalister and Avon Rivers, following the 1914 drought and the subdivision of the river flats into small holdings (particularly at Boisdale in 1912). Since the Macalister River has a much larger annual flow (475,000 acre ft) than the Avon (88,000 acre ft), the District's major reservoir was built on the Macalister. Work began in 1919 on a concrete dam at Glenmaggie, which was completed in 1926.

Meanwhile, construction had begun on the Main Northern Channel which runs east from Glenmaggie ; in 1925, the first delivery of irrigation water was made in the Boisdale area, and within a few years the northern channel system had been extended to the vicinity of Sale. The Main Southern Channel was also built by 1927. Together with its associated channels, it irrigates the area north of Tinamba, and in 1939 was extended to the Riverslea area. Following the Second World War, work began on extensions of channel systems surrounding the Thomson River, in the Nambrok-Denison area to the south, and the Heyfield extension area to the north. Under a soldier settlement scheme, 131 farms were allocated in the Nambrok area and water first flowed there from Glenmaggie in 1952.

Five years later, in 1957, the capacity of Lake Glenmaggie was increased from 104,500 acre ft to 154,300 acre ft by the construction of gates on the spillway. To cope with increasing demands for water, Maffra Weir was built on the Macalister River at Maffra in 1958, together with the Main Eastern Channel which carries water from the weir to the channel system between Maffra and Sale. The channel network was also extended at this time to additional areas at North Newry, West Boisdale, Montgomery, and The Heart. The Cowwarr Weir on the Thomson River six miles west of Heyfield and the Cowwarr Channel were completed in 1960 to increase irrigation supplies to the Nambrok-Denison area when flows in the river are sufficiently high.

In low lying parts of the Nambrok-Denison district, groundwater levels began to rise soon after the introduction of irrigation in 1952. By 1959 a considerable area had been seriously affected by salting, and other areas were threatened as the water table continued to rise. After intensive investigations, the problem was overcome by a system of deep surface drains, together with pumps and free flowing bores to remove groundwater from the underlying aquifers. Since 1963 construction activities have been concentrated on drainage works, following the introduction of more intensive irrigation. The District now has 410 miles of supply channels and 305 miles of drainage channels.

In the early days of irrigation Macalister District farmers grew sugar beet, maize, lucerne, and fodder crops. From the mid-1930s, however, there has been an increase of perennial pasture (ryegrass and clover), which now accounts for 90 per cent of the irrigated area. The perennial pasture is used almost entirely for grazing dairy cattle. The remaining area under irrigation comprises native and annual pasture, fodder crops, lucerne, cereal crops, and vegetables.

Agriculture

Soils

The soils in the Sale district are very variable. In order of importance they are :

Grey soils with alkaline sub-soils. These soils are found between the La Trobe and Avon Rivers and are formed from river alluvium. The surface is a moderately acid clay loam, and the clay content and pH (hydrogen-ion concentration) increase with depth. The Irrigation District is confined almost entirely to these soils.

Podsols. These soils are acidic, and two types occur within the district. The lowland soils on clay sediments are usually grey sandy loams and loams with yellow-grey heavy clay sub-soils within a foot of the surface ; in their native state these soils carried a light forest, mainly of forest red gum. The second podsol type is deep, sandy soils ; these are more acidic and undulating than the other podsol type. In their native state they carry poor quality timber, and because of their high acidity and low fertility have not been as developed for agriculture as the better quality soils of the Sale district.

Alluvial soils. The soils are formed by recent deposition of silt and are found along the banks of the rivers in the district. They are well drained, fertile, and support an excellent pasture, and are used for cropping and vegetable growing.

Swamp soils. These soils occur in the lower reaches of the La Trobe River and are subject to regular and heavy flooding. They provide good summer grazing for cattle and respond well to superphosphate.

Pastures

Irrigated pastures are based mainly on white clover and perennial ryegrass. Other species sown include H.I. ryegrass, cocksfoot, and strawberry clover. Most of the irrigated soils have been graded so that irrigation water can be more easily controlled, and with careful grading and correct pasture management regrading should not be needed for many years. Superphosphate is the main fertiliser needed, but with intensive production potash is becoming necessary over an increasing area of the irrigation district. Sufficient fertiliser and adequate irrigation (every three weeks in the spring and autumn and fortnightly in the summer), also help to achieve high levels of pasture and animal production.

"Dry" or unirrigated pastures are based on subterranean clover and introduced grasses such as perennial ryegrass, cocksfoot, and *Paspalum dilatatum*. However, the value of the native grasses of the district and some of the volunteer grasses such as barley grass, is often underestimated. The phosphate level of most soils in their native state is very low, and on some soils the potassium levels are also low. However, once these deficiencies are corrected, pasture production is high. The evenly distributed annual rainfall and the relatively mild winters produce a more consistent growth pattern than in many other areas of the State. Consequently, fodder conservation for seasonal supplementary feeding is not as necessary in the Sale district as in lower rainfall areas.

Dairying

The major agricultural enterprise in the Sale area is dairying, which is confined almost entirely to the Macalister Irrigation District just north and north-west of Sale. Although there is considerable variation between farms,

the "typical" farm in the District consists of about 130 acres, and carries a herd of 80 to 100 milking cows together with replacement stock. In many instances the same farm will own, or have access to, an additional area of unirrigated country outside the District on which most of the stock is grazed during their non-milking period.

The predominant breed in the area is the Jersey-Friesian cross. This has arisen from the increasing use in recent years of Friesian semen in herds that originally consisted of Jersey cows. An important feature of dairying in the area is the low cost of production. Cattle are able to graze intensively on growing pasture throughout the year, with relatively little need for fodder conservation and no need for supplementary feeding with concentrates.

Farm tenure is unusual in the Macalister Irrigation District because approximately one third of the dairy farms are operated by sharefarmers. This is partly responsible for the higher average herd size in the area than elsewhere in the State. The labour force is generally comprised of members of the farmer's own family. However, with increasing herd size there is a tendency for additional labour to be employed to provide more flexible and better working conditions. Improvements have been made in recent years in the field of work simplification. The most significant of these has been the conversion of a large number of old dairies into modern herringbone cowsheds. The average annual production for the area is approximately 300 lb of butterfat, or 670 gallons of milk for each cow. This is generally supplied by the farm in the form of bulk milk and is collected by one of the three local dairy factories. A small proportion of this, distributed among the majority of farms, is also collected under contract for Melbourne's milk trade. The balance is manufactured locally into butter and skim milk powder, or to a lesser extent, cheese, casein, and condensed milk.

Although dairying is the major enterprise on most farms, a number are also engaged in smaller businesses, such as the rearing of Friesian or beef-cross calves for young beef, or various forms of cash cropping. Co-operation among farmers of the Sale district has led to the formation of two important institutions—the Macalister Research Farm and the Central Gippsland Artificial Breeding Centre—both of which provide them with valuable services. The Macalister Research Farm is a co-operatively owned farm which was purchased in 1961 to demonstrate Department of Agriculture recommendations for intensive dairying on a wholly commercial farm basis. Since then, its achievements have been considerable. The 120 acre farm has raised its butterfat production from 19,000 lb in its first year to over 43,000 lb in 1969–70. These improvements have been attributed to increased stock numbers, heavy topdressing, effective irrigation, intensive grazing, and artificial breeding. All farm activities are regularly reported and discussed during farm visits, field days, and through the local press and radio. A university survey conducted in 1970 indicated that the Macalister Research Farm has made a significant contribution to agricultural development in the district as both a demonstration unit and an applied research unit for local extension officers.

The Central Gippsland Artificial Breeding Centre provides the services of both artificial breeding and herd testing for central Gippsland at one co-operative centre located at Maffra. Thus the same office space, administrative facilities, and many members of staff are shared between the two

organisations, resulting in their improved effectiveness and efficiency. In the 1970 season approximately 26,000 cows were artificially inseminated, and herds from 260 farms were tested. The improved organisation of the co-operative enables it to provide several additional services to district farmers. These include individual cow testing, as part of a mastitis control programme, and contract freeze branding.

Beef

The mountain areas to the north and north-east of Sale provide a ready source of fattening and "growing on" beef cattle for Sale and district graziers. These cattle are bought at the autumn calf sales each year and either fattened for sale to local and Melbourne butchers, or "grown on" to be sold to other graziers for fattening. Many graziers run their own breeding herds and produce either vealers for slaughter or store cattle for other graziers to fatten.

Sheep

For many years there has been a small but consistent prime lamb industry in the Sale district. However, with low wool and lamb prices in the late 1960s, interest in this class of livestock has waned slightly and there has been a tendency to replace sheep with cattle. South of Sale and extending almost to Yarram, there is a compact area which produces high quality wool from Merino sheep. This area has a lower rainfall than most of Gippsland and is well suited to the finer woolled sheep.

Crops

Cereal cropping is now of only minor importance in the Sale district, although it was popular before the Second World War. Vegetable cropping is slowly coming into prominence in the district. Tomatoes are grown under irrigation on better drained, more friable soils and peas are grown under contract for freezing.

Forests

In 1950 A.P.M. Forests Pty Ltd, a wholly owned subsidiary of Australian Paper Manufacturers Ltd, commenced a large scale land buying and forestry project in Gippsland to ensure future pulpwood requirements of the Maryvale pulp and paper mill. By 1970, 71,400 acres of plantations had been established in Gippsland. Of this total, 18,500 acres of pine plantation are located in the Longford area four miles south of Sale, where planting is continuing at the rate of 1,000 acres each year.

The annual wood intake by the Maryvale pulp mill is 12.5 million cubic ft of eucalypt and 7 million cubic ft of pine pulpwood. In 1964 Pyneboard (Gippsland) Pty Ltd established a particle board factory at Rosedale, 12 miles from the Longford Tree Farm. Pine thinnings from the Longford and adjoining tree farms supply this factory's requirements. Thinning of the Longford pine plantations commenced in 1962 and by 1970 over 12 million cubic ft of pinewood had been delivered to the Maryvale pulp mill and the Pyneboard particle board factory. Their current annual production from thinnings is 2.5 million cubic ft. Longford is also the site of the central nursery which produces the company's Gippsland requirements of some 4.5 million pine seedlings annually. The establishment, maintenance, and harvesting operations in these Longford plantations provide employment for a permanent crew of twenty employees and a contracting force of about fifty men.

The protection of these extensive plantations from fire is a major problem each summer. The company has organised its tree farm employees in Gippsland as well trained and equipped fire fighting crews. Company fire control operations in Gippsland are co-ordinated with those of the Forests Commission of Victoria, the Country Fire Authority, and the State Electricity Commission. Six tree farm crews, including the Longford crew, are registered as Rural Fire Brigades under the Country Fire Authority.

Maffra Beet Sugar Factory

Sugar beet was first grown in Victoria in 1866, and a factory to extract the sugar from it was established in 1873 at Anakie (near Geelong). However, this first attempt was not successful, nor was the attempt begun in 1894 by the Maffra Beet Sugar Company, which, despite assistance in the form of government subsidy, also proved unsuccessful. Finally the Government purchased its factory and plant. More than a decade elapsed before activity recommenced, this time under the control of the Department of Agriculture. Modernisation was carried out in 1937 by which time the factory's capacity was 50,000 tons of beet per season.

The year 1942 marked the beginning of decline for the beet sugar industry, the area planted falling from between 3,000 and 4,000 acres per annum in peak years to a few hundred acres by 1948. Reasons for the decline are considered to be competition from the more profitable dairy industry and the difficulty in obtaining seasonal labour.

For a brief period in 1949, after its purchase from the Government by Parson Bros and Co. Pty Ltd, the factory was used as a maize processing unit to extract starch. This project also met with failure and in 1953 the factory was sold to the Maffra Dairy Co-operative Company.

Gas Processing and Crude Stabilisation Plant

The Gippsland Gas Processing and Crude Stabilisation Plant at Longford, 12 miles south of Sale, is the first stop ashore for crude gas and oil from Bass Strait. Basically, the gas processing facilities remove the heavy hydrocarbons from the natural gas, leaving "dry gas" which meets market specifications. The crude oil stabilisation facilities remove the light hydrocarbons from the oil which make it unstable in atmospheric storage tanks. From Longford, the liquefied petroleum gas (LPG) is piped 114 miles to the Long Island Point fractionation plant at Western Port.

The Longford plant has contributed to the present economic growth of the Sale area by the building and technical projects necessary for establishing it. Both the offshore oil and gas rigs and the Longford plant are being progressively operated by computers, aided only by a minimal technical and maintenance staff. The absence of a deepwater port in the Sale region has been the major factor inhibiting the establishment of secondary industries capable of utilising the chemical by-products of crude oil and natural gas.

Electricity

In 1920 the Sale Co-operative Butter and Cool Storage Company commenced the supply of electricity to the township of Sale. It acted under franchise from the Sale Shire Council which had obtained an Order in Council in 1918. The system was 230/400 volts 50 cycle 3 phase and motive power was steam with a total capacity 150 kW. There were 306 consumers when the State Electricity Commission of Victoria acquired the undertaking on 1 July 1924.

In Maffra township, the Maffra Shire Council commenced the supply of electricity on 14 January 1914. The system of supply was 230 volts, direct current. Motive power was gas and the capacity of the generator 40 kW; the supply was supplemented by a 435 amp-hour battery. The State Electricity Commission of Victoria acquired the undertaking on 1 September 1924.

Early in 1922 the State Electricity Commission laid plans to extend a 22,000 volt system east from the proposed Yallourn Power Station to serve the Traralgon, Maffra, Sale, and Bairnsdale districts. This system served the Sale-Maffra area until just after the Second World War when a 66 kV line was built between Yallourn and Maffra and a 66/22 kV substation was established at Maffra. Continued load growth in the area has resulted in an additional two 66 kV lines to supply the Maffra 66/22 kV substation.

Since 1924 extension of electricity supply to the outlying small towns and to the rural areas of the Sale and Maffra districts has been gradual, but it is now near completion. Major electricity consumers in the Sale-Maffra area are mainly associated with the dairying and timber industries, but they also include the district's service industries and the growing number of secondary industries. The administration of electricity supply in the Sale-Maffra areas is carried out by local managers based in each town. There are now approximately 5,000 consumers, including 586 farms in the Sale district, and 4,739 consumers, including 904 farms in the Maffra district.

Local government administration and public utilities

Sale is situated on the Thomson River, 130 miles east of Melbourne. It is the principal town in Gippsland, which is primarily a region of dairying, grazing, and mixed farming. Sale was proclaimed a Borough on 10 August 1863, made a Town on 21 November 1924, and declared a City on 31 May 1950. The population of the City of Sale at 30 June 1971 was 10,404.

The Sale City Council consists of nine councillors elected from three wards. The Council not only administers the City, but the councillors are also the members of the Sale Sewerage Authority and the Sale Water Supply Authority. This method of administration has several advantages because the different problems of three separate authorities are readily resolved by the one body of men.

Sale's water supply is drawn from bores which can be supplemented from the Thomson River. The bore water supply is filtered before it is delivered to the reticulation system for private and commercial consumption. Current expansion and improvement works include the installation of ring mains and new pumps, and additional storage facilities are also planned.

Sewage effluent from the City of Sale is pumped through a pipeline to the La Trobe Valley Outfall Sewer at Longford. From there it is discharged to the Dutson Downs Sewage Farm for final treatment. Sewerage mains extend throughout the City and current works include the duplication of mains and the installation of trunk sewers to meet future demands.

Library, Arts Centre, and Memorial Hall

The free public library is located next to the Municipal Offices in Sale's City centre. It contains approximately 12,000 books and provides services for both adults and children.

The Sale Regional Arts Centre provides facilities for local arts and crafts exhibitions presented twice each year by the Sale Arts Group. Other displays are presented throughout the year and are changed about every fortnight.

The Memorial Hall is centrally situated in the same block as the city offices and the library. It has a capacity of over 700 people and is used as a concert hall for A.B.C. Concerts, besides dances, balls, and other social functions.

Social and welfare services

The City Council and several voluntary organisations maintain many social and welfare services for Sale residents. A modern infant welfare centre is operated by a full-time nursing sister, and further medical services are provided by free immunisation injections, and regular campaigns to immunise pre-school children. A permanent social worker is employed by the Sale City Council in conjunction with the Gippsland Base Hospital and adjoining shires, while special home-help is made available by the Council. Elderly citizens in Sale are provided with special social and medical facilities. A modern club house has recently been built by the Citizens Welfare Committee, and meals-on-wheels and chiropody services are available through the Elderly Citizens Club and the Gippsland Base Hospital.

Gippsland Base Hospital

The present Gippsland Base Hospital was built in 1929 and has since expanded to care for a capacity of 186 patients. The hospital provides specialist pathologist, radiologist, and therapist services and has plans for specialised and experimental additions. These plans were approved in 1968 and building has commenced. The programme includes a 50 bed geriatric wing and day hospital (which was opened in September 1971), a medical services wing, the remodelling of the main hospital, a new multi-storey ward building, extensions to the pathology department, a central library and seminar wing, and a new stores building with dining facilities. An interesting experiment is the conversion of one hospital building to a day treatment centre for elderly patients to assess the need for, and the effectiveness of, this type of facility.

Education

The educational pre-eminence of Sale in Gippsland was established by the commencement of a National school in 1854, a Catholic school in 1867, a School of Design in 1885, a convent of Notre Dame de Sion in 1893, and an Agricultural High School in 1907. During this period Sale also witnessed a remarkable proliferation of proprietor schools and the following schools were established: Sale Seminary for Ladies, 1866; Ladies' Boarding and Day School, 1867; Sale Grammar School, 1869 (which in 1870 became the Gippsland College); Evening and Day School, 1870; Sale Private Academy, 1871 (which in 1872 became the Sale Commercial Academy); and a Ladies' College in 1872. These proprietor schools were generally small, segregated institutions, though it was not unusual for small boys to attend preliminary grades at a girls' school. Moreover, the school buildings were rarely built for educational purposes and commonly took a limited number of boarders. The proprietor schools usually had a brief existence, their life cycle being essentially one of birth, prosperity, decline, and closure. The decline was sometimes arrested by the establishment of a "successor school" under a new principal and, occasionally, a new name. This tended to invigorate the school for a time, but the familiar pattern was



Decentralised industry in attractive surroundings at Sale.

City of Sale

An aerial view of the R.A.A.F. Base, East Sale, looking north-east. HS748 aircraft of the School of Air Navigation are lined up on the tarmac.

Royal Australian Air Force





Sale municipal buildings and civic centre.
City of Sale

An aerial view of Sale looking north over Lake Guthridge.
City of Sale



soon repeated. It was only after the State entered secondary education in Sale in 1907 that this cyclical pattern concluded and the proprietor school became a relic of an educational age that was not to return.

The metamorphosis of Gippsland College, Sale, one of the most successful proprietor schools, helps clarify this confused and neglected period of the history of education in Sale. The origins of Gippsland College can be traced to 1869 when the special grammar classes for senior students at the Sale Common School were terminated by the Minister of Public Instruction. Consequently, in August 1869, the Sale Grammar School came into existence and in the following year was reformed as Gippsland College under a new principal. This college at first flourished, but it was in marked decline by 1884 when it was acquired by a Mr Sillett. Under the new principal's direction the college was revitalised and a new school was built in 1892. Sillett's school was a day and boarding school for boys with a strong emphasis on their preparation for university entrance. By 1906, however, the enrolment at Gippsland College had declined considerably, though its final demise in 1907 was undoubtedly hastened by the opening of the Sale Agricultural High and Continuation School.

Despite the passing of the proprietor schools early in the twentieth century, Sale continued as the centre for educational facilities in Gippsland. The Sale Agricultural High and Continuation School became a regional school, while the opening of St Patrick's College in 1922 and St Anne's Church of England Girls' Grammar School in 1934 as boarding schools confirmed the educational importance of Sale. Despite limited provision for adult education, Sale has maintained this role in east Gippsland, principally as a result of the presence of both State and denominational secondary schools.

There are two State secondary schools, Sale High School and Sale Technical School. Most students at these schools come from the three primary schools within Sale and from the twenty-two district primary schools. Each year many students from Dargo State School, about 50 miles north of Sale, attend Sale Technical School. Three denominational schools are found in Sale—St Anne's and Gippsland Grammar School, Our Lady of Sion College, and St Patrick's College. These schools, with the exception of Our Lady of Sion College, also offer primary education, although in the case of St Patrick's College, this is restricted to grades V and VI. The denominational secondary schools, because of their boarding facilities, serve a much wider area of Gippsland than the State schools. However, as elsewhere in Victoria, there is a discernable decline in the popularity of boarding school education in Sale. This decline in the number of boarders reflects changing parental attitudes and socio-economic conditions, the establishment of similar schools elsewhere in the region, and improved bus services. A daily service of 27 buses carries district children to Sale's schools.

The increase of 17.1 per cent in the population of Sale between 1961 and 1969, due particularly to the growing workforce associated with Bass Strait oil and gas discoveries, has seriously strained existing school facilities. Sale Technical School has added a three storey classroom block, and a third primary school was completed in 1971. The Catholic school system has reduced overcrowding at primary level by the establishment in 1970 of a second parochial school named St Thomas. One other significant develop-

ment in education in Sale was the amalgamation of Gippsland Grammar School and St Anne's Church of England Girls' Grammar School in 1971 to form St Anne's and Gippsland Grammar School. Pre-school education has also expanded in Sale and a third free kindergarten was built in 1971.

Sale Technical School

Sale Technical School originated in 1885 when the Committee of the Mechanics Institute established a School of Design, and it was not until 1919 when a Junior Technical School was established that effective responsibility for the school was transferred from the Mechanics Institute to the Education Department. The following dates mark the completion of major additions to the Technical School: boys school, 1926; girls section, 1946; metal trades block, 1956; and a general studies and science block, 1970. In 1970 the Technical School offered first year diploma studies in engineering, food and food services, fashion design and production, and business studies, besides first and second year diploma courses in art. The school also offers a range of art and trade classes for part-time and evening students, and since 1968 it has been the regional centre for instruction in wool classing.

Sale High School

The school opened as the Sale Agricultural High and Continuation School in April 1907 with nineteen students, and in 1917 moved to a new building on its present site. Sale High School was the first State secondary school in Gippsland and the third in Victoria. In its early years the school served all Gippsland and until 1914 at least half of its students required boarding facilities in Sale. At first, there was a strong emphasis placed on courses for future farmers and teachers. However, agricultural education failed to attract sufficient students and the school farm was closed in 1928. Sale High School now has an enrolment of approximately 500 students and offers comprehensive courses. Recent major building additions have been a general classroom block in 1960, a domestic arts block in 1962, and the second section of a courtyard type building was completed in 1971 to accommodate the senior school.

Our Lady of Sion College

The Sisters of Our Lady of Sion were recruited from France by the first Roman Catholic Bishop of Gippsland, Bishop Corbett. After arriving in Sale in 1890, the Sisters began teaching in conjunction with St Mary's School, which had been staffed since its inception in 1867 with lay teachers. In 1893 the Sisters opened a day and boarding school which offered primary and secondary education for Gippsland girls. A modern school adjacent to the original convent building was opened in 1967. More comprehensive education has been introduced by subjects such as cookery, dressmaking, and art for the 300 students at Our Lady of Sion College.

St Patrick's College

This college, which was founded by Bishop Phelan and staffed by Marist Brothers, was opened in 1922 as a secondary day and boarding school for boys. Until the early 1950s St Patrick's College served as the only Catholic boarding school for boys in Gippsland. It has expanded considerably and important building additions were made in 1939, 1960, 1964, and 1970. The college has an approximate enrolment of 350 students and offers a general education, though traditionally this has had an academic orientation.

St Anne's Church of England Girls' Grammar School

St Anne's was founded by Bishop Cranswick in 1924 as a local primary school and in 1934 it incorporated the Church of England Girls' Hostel to become a diocesan boarding school for girls, offering both primary and secondary courses. The school has grown and in 1971 amalgamated with Gippsland Grammar School to become "The St Anne's and Gippsland Grammar School".

Gippsland Grammar School

This school, which was constituted under an Act of Synod by the Church of England Diocese of Gippsland in 1959, was opened in the Old Deanery in 1961. The school moved to its present site in 1962 and now has an approximate enrolment of 200 students at both primary and secondary levels.

History of the R.A.A.F. Base, East Sale

The R.A.A.F. came to an agreement with the Shire of Avon in 1942 to purchase approximately 1,200 acres from several local graziers in an area known as The Heart. The present quarters occupied by the Officer Commanding was the original homestead of one of these graziers. The R.A.A.F. moved to East Sale in April 1943 and by the following month the strength of the Base was approximately 2,500 personnel, including 300 students under flying training. The aircraft complement of the Base consisted of Beauforts, Hudsons, Oxfords, Fairy Battles, and one Tiger Moth. Although predominantly a training base, East Sale aircrew and aircraft took part in anti-submarine patrols and escorted shipping convoys in the Bass Strait and Tasman Sea areas during the Second World War.

In June 1945 a further 650 acres of land was purchased on the eastern boundary of the aerodrome for future expansion. However, at the end of the Second World War there was a rapid decrease in the training role of East Sale. All expansion plans were suspended and hundreds of personnel were discharged. Crew training resumed in February 1946 and in 1948 work was commenced on a new runway, thereby laying the foundation for a permanent R.A.A.F. Base in Gippsland. On 22 November 1959 the City of Sale granted Freedom of Entry of the City to the Base.

The R.A.A.F. Base at East Sale continues its role as a training base, and units include the Central Flying School, School of Air Navigation, School of Photography, Base Squadron, and Maintenance Squadron. The aircraft now based at East Sale include the HS 748 Navigation Trainer, the Macchi Trainer, and the Dakota. The approximate strength of the Base was 750 in 1970 with most of the 350 married servicemen living in the City of Sale.

Further references

The following articles have appeared in earlier *Victorian Year Books*: Geelong (1962, pages 379-81), Ballarat (1963, pages 389-95), Bendigo (1964, pages 413-20), Latrobe Valley (1965, pages 791-7), Warrnambool (1966, pages 777-83), Shepparton (1967, pages 797-811), Wangaratta (1968, pages 795-812), Mildura (1969, pages 807-33), Horsham (1970, pages 797-813), and Hamilton (1971, pages 761-77).

A separate section describes Melbourne in each *Year Book* since 1961.

Appendix B

AUSTRALIAN NATIONAL ACCOUNTS

The information given in this appendix has been derived from the publication *Australian National Accounts, National Income and Expenditure, 1969-70*, published by the Commonwealth Statistician, Canberra.

National accounting aims at providing a systematic summary of the transactions taking place in the economy, especially those which relate to the production and use of goods and services and to transfers of income or capital between sections of the economy.

Concepts

The following notes describe briefly the fundamental concepts of production and the income and expenditure involved.

Gross national product at market prices (usually referred to as the gross national product) is the total market value of goods and services produced in Australia within a given period, after deducting the cost of goods and services (other than capital equipment) used in the process of production. It is the sum, for all producers, of the value of their sales (including any indirect taxes levied thereon) plus increases in their stocks, less their purchases of goods and services from other producers. For those producers, like public authorities and financial enterprises, which do not actually sell their output, it includes their output, instead of their sales, valued at cost.

Gross national product at factor cost is defined as gross national product at market prices, less indirect taxes, but with the addition of subsidies, and is the total amount of gross national product accruing to the factors of production employed.

Net national product is the resulting aggregate if depreciation is deducted from gross national product at factor cost. In the national accounts, allowances for depreciation are restricted to public and private enterprises, no depreciation being attributed to assets used by public authorities, non-profit making organisations, etc.

National income is defined as the value of net national product, less total income payable overseas in the form of interest, dividends, undistributed income, etc., plus income receivable from overseas in these forms. Adjustments are also made to deduct wages, professional earnings, etc., earned in Australia by non-residents, and to add similar incomes earned abroad by persons normally resident in Australia.

National turnover of goods and services is the sum of the gross national product plus imports of goods and services. In turn, the total turnover of

goods and services equals the sum of gross national expenditure and exports of goods and services.

Gross national expenditure is the total expenditure within a given period on final goods and services bought for use in the Australian economy. It consists of personal consumption expenditure, fixed capital expenditure by private and public enterprises and public authorities, any increase in the value of stocks, and net current expenditure on goods and services by public authorities and financial enterprises.

Sectors

The following is a brief description of the sectors into which the economy has been divided for the purposes of the National Accounts :

1. *The personal sector* includes all persons and private non-profit organisations serving persons other than those included in the financial enterprises sector.
2. *The public authority sector* includes the whole of the activities of the Commonwealth Government, State and local governments, and semi-governmental bodies with the exception of the current operations of public trading and financial enterprises which are excluded. Public trading and financial enterprises are defined as bodies which aim at covering the bulk of their expenses either by sales of goods and services (trading), or by charges for services and net interest receipts (financial).
3. *The financial enterprises sector* includes both public and private financial enterprises which are regarded as providing the financial mechanism for the functioning of the economy rather than producing or distributing goods and services. In one way or another they are engaged mainly in the borrowing and lending of money. Examples of the enterprises included in this sector are banks, hire purchase companies, co-operative building societies, life insurance companies, and superannuation funds.
4. *The trading enterprises sector* includes all business undertakings engaged in producing goods and services. Thus it includes companies, public enterprises, partnerships, and self-employed persons, including farmers. Owners of all dwellings are included because they are regarded as operating businesses, receiving rents (from themselves), and paying expenses.
5. *The overseas sector accounts* record all transactions between Australian persons, businesses, and governments, and overseas residents.

National Accounts

Tables 1 to 7, which follow, summarise the transactions which have taken place in the Australian economy during 1969-70 with a production account and a capital account for the economy as a whole. For each of the different sectors, however, a current (or income appropriation) account is given. The following is a short description of the accounts which appear in the tables :

1. *The National Production Account* is a consolidation of the production accounts of each sector. Credited to the account are the following items : net current expenditure on goods and services ; gross fixed capital expenditure ; change in value of stocks ; and exports of goods and services. The payments side shows wages and salaries, indirect taxes, and imports of goods and services. The balance, which represents the gross operating

surplus of trading enterprises, is carried to the Trading Enterprises Income Appropriation Account.

2. *The Trading Enterprises Income Appropriation Account* is shown as receiving the gross operating surplus of trading enterprises from the National Production Account, and property income, namely, dividends, non-dwelling rent, and interest from other sectors. This total is allocated to depreciation allowances and to various transfer payments.

3. *The Financial Enterprises Income Appropriation Account* shows property income as the sole receipt. The net current expenditure on goods and services of these enterprises is shown on the outlay side.

4. *The Personal Current Account* records as receipts, wages and salaries, and transfer incomes. Payments include current payments for goods and services and transfer payments. The balance is transferred to the national capital account under the heading "Personal saving".

5. *The Public Authorities Current Account* records receipts of taxes (direct and indirect), interest, and the net income of public trading and financial enterprises. Expenditure includes net current expenditure on goods and services by those government and semi-governmental bodies which are not trading or financial enterprises. Also included are cash benefits (paid to persons in return for which no service is rendered or goods supplied), interest paid, subsidies granted, overseas gifts, and grants towards private capital expenditure.

6. *The Overseas Current Account* records all transactions of a current nature between Australian and overseas residents. The balance of the account reflects the net inflow of capital from overseas and withdrawal from monetary reserves.

7. *The National Capital Account* shows, on the receipts side, the savings of the various sectors. The public authority surplus includes the net income of public enterprises. Payments include, for all sectors, purchases of new buildings and capital equipment and the increase in value of stocks.

1. NATIONAL PRODUCTION ACCOUNT, 1969-70 (\$m)

Wages, salaries, and supplements	15,718	Net current expenditure on	
Gross operating surplus of trading enterprises—		goods and services—	
Companies	4,644	Personal consumption	17,335
Unincorporated enterprises	4,250	Financial enterprises	428
Dwellings owned by persons	1,449	Public authorities	3,708
Public enterprises	1,020		
Gross national product at factor cost	27,081	Gross fixed capital expenditure—	
		Private	5,159
Indirect taxes, less subsidies	3,017	Public enterprises	1,479
Gross national product	30,098	Public authorities	1,223
Imports of goods and services	4,733	Value of physical change in stocks	475
		Statistical discrepancy	286
National turnover of goods and services	34,831	Gross national expenditure	30,093
		Exports of goods and services	4,738
		National turnover of goods and services	34,831

2. TRADING ENTERPRISES INCOME APPROPRIATION ACCOUNT, 1969-70
(\$m)

Depreciation allowances	2,610	Gross operating surplus	11,363
Interest, etc., paid	1,614	Interest, etc., and dividends received	231
Company income—		Undistributed income accruing from overseas	24
Income tax payable	2,984		
Dividends payable			
Undistributed income			
Unincorporated enterprises income	3,028		
Personal income from dwelling rent	750		
Public enterprises income	632		
Total outlay	11,618	Total receipts	11,618

3. FINANCIAL ENTERPRISES INCOME APPROPRIATION ACCOUNT, 1969-70
(\$m)

Depreciation allowances	42	Interest, etc., received	2,040
Net current expenditure on goods and services	428	Dividends received and undistributed income accruing from overseas	70
Interest paid	699		
Company income—			
Income tax payable	236		
Dividends payable			
Undistributed income			
Public enterprises income	195		
Retained investment income of life insurance funds, etc.	510		
Total outlay	2,110	Total receipts	2,110

4. PERSONAL CURRENT ACCOUNT, 1969-70
(\$m)

Personal consumption	17,335	Wages, salaries, and supplements	15,718
Interest paid	261	Interest, etc., received	789
Income tax payable	2,717	Dividends	569
Estate and gift duties paid	391	Unincorporated enterprises income	3,028
Remittances overseas	111	Income from dwelling rent	750
Saving	1,858	Remittances from overseas	182
		Cash benefits from public authorities	1,637
Total outlay	22,673	Total receipts	22,673

5. PUBLIC AUTHORITIES CURRENT ACCOUNT, 1969-70
(\$m)

Net current expenditure on goods and services	3,708	Indirect taxes	3,287
Subsidies	270	Direct taxes (paid) on income	4,046
Interest, etc., paid	731	Other direct taxes, fees, fines, etc.	391
Overseas grants	180	Interest, etc., received	137
Cash benefits to persons	1,637	Public enterprises income	827
Grants towards private capital expenditure	49		
Surplus on current account	2,113		
Total outlay	8,688	Total receipts	8,688

6. OVERSEAS CURRENT ACCOUNT, 1969-70

(\$m)

Exports of goods and services	4,738	Imports of goods and services	4,733
Interest, etc., received from overseas } Dividends receivable from overseas }	130	Interest, etc., paid and dividends payable and profit remitted overseas	492
Undistributed income accruing from overseas	24	Undistributed income accruing to overseas residents	370
Personal remittances from overseas	182	Personal remittances overseas	111
Overseas balance on current account	812	Public authority grants and contributions	180
Total debits to non-residents	5,886	Total credits to non-residents	5,886

7. NATIONAL CAPITAL ACCOUNT, 1969-70

(\$m)

Gross fixed capital expenditure—		Depreciation allowances	2,652
Private	5,159	Increase in dividend and income tax provisions	125
Public enterprises	1,479	Undistributed company income accruing to residents	503
Public authorities	1,223	Retained investment income of life insurance funds, etc.	510
Increase in value of stocks—		Personal saving	1,858
Value of physical change in stocks	475	Public authority grants towards private capital expenditure	49
Total use of funds	8,336	Public authorities surplus on current account	2,113
Statistical discrepancy	286	Overseas balance on current account	812
Total capital funds accruing	8,622	Total capital funds accruing	8,622

The following tables are included to provide information of personal income and personal consumption expenditure within Victoria during each of the years 1965-66 to 1969-70, together with an analysis of Victorian farm income during the same period. Tables are also given to show total Victorian figures relative to those of other Australian States.

VICTORIA—PERSONAL INCOME

(\$m)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Wages, salaries, and supplements	3,109	3,396	3,679	4,018	4,486
Farm income (a)	341	378	243	338	350
Income from dwelling rent	216	235	245	257	270
Cash benefits from public authorities	307	333	344	372	425
All other income	791	856	903	970	1,066
Total	4,764	5,198	5,414	5,955	6,597

(a) Unincorporated farms only.

AUSTRALIA—TOTAL PERSONAL INCOME BY STATES
(\$m)

State	1965-66	1966-67	1967-68	1968-69	1969-70
New South Wales	6,051	6,783	7,106	7,988	8,884
Victoria	4,764	5,198	5,414	5,955	6,597
Queensland	2,091	2,305	2,408	2,683	2,873
South Australia	1,451	1,578	1,612	1,844	2,025
Western Australia	1,097	1,221	1,353	1,550	1,683
Tasmania	447	495	515	557	611
Total Australia	15,901	17,580	18,408	20,577	22,673

VICTORIA—PERSONAL CONSUMPTION EXPENDITURE
(\$m)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Food	829	881	934	962	1,019
Cigarettes and tobacco	122	126	133	139	142
Alcoholic drinks	218	237	262	282	307
Clothing, etc.	371	392	419	429	457
Chemists' goods	96	102	109	123	134
Medical, hospital, and funeral expenses	130	148	165	179	200
Rent	488	530	572	618	670
Gas, electricity, fuel	121	127	133	149	158
Household durables	263	278	299	329	358
Newspapers, books, etc.	68	74	78	82	87
All other goods, n.e.i.	112	119	123	129	140
Travel and communication	503	540	592	641	714
All other services	370	400	448	485	537
Total	3,692	3,953	4,267	4,548	4,923

AUSTRALIA—TOTAL PERSONAL CONSUMPTION EXPENDITURE BY STATES
(\$m)

State	1965-66	1966-67	1967-68	1968-69	1969-70
New South Wales	4,968	5,346	5,829	6,278	6,925
Victoria	3,692	3,953	4,267	4,548	4,923
Queensland	1,664	1,783	1,921	2,021	2,174
South Australia	1,136	1,199	1,291	1,383	1,497
Western Australia	881	969	1,084	1,211	1,339
Tasmania	367	396	424	447	478
Total Australia	12,707	13,645	14,817	15,888	17,335

VICTORIA—FARM INCOME
(\$m)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
Gross value of farm production—					
Wool	194	181	133	156	} 974
Other pastoral products	189	196	222	190	
Wheat	90	104	44	122	
Other grain crops	20	27	10	22	
Other crops	153	194	168	188	
Dairying, poultry, etc.	242	264	233	249	
Total	888	966	810	927	974
Less stock valuation adjustment	6	—4	1	—3	} 620
Less costs—					
Marketing costs	94	92	69	95	
Seed and fodder	102	123	126	101	
Depreciation	84	94	90	91	
Wages, net rent, and interest paid	75	82	85	93	
Other costs	183	196	194	208	
Total	544	583	565	585	620
Total farm income	344	383	245	342	354
Less company income	3	5	2	4	4
Income of farm unincorporated enterprises	341	378	243	338	350

AUSTRALIA—TOTAL FARM INCOMES BY STATES (a)
(\$m)

Particulars	1965-66	1966-67	1967-68	1968-69	1969-70
New South Wales	200	420	188	323	292
Victoria	341	378	243	338	350
Queensland	202	260	212	285	222
South Australia	111	153	65	146	120
Western Australia	123	116	92	121	37
Tasmania	31	36	21	32	30
Total Australia	1,008	1,363	821	1,245	1,051

(a) Unincorporated farms only.

Appendix C

POPULATION CENSUS, 30 JUNE 1971

The information contained in this appendix represents early results of the Census of the Commonwealth of Australia held on the night of 30 June 1971. The figures are field count totals and are subject to revision.

AUSTRALIA—CENSUS POPULATIONS OF AUSTRALIAN STATES, TERRITORIES, AND CAPITAL CITY URBAN AREAS, 1971

State or Territory	Population			Capital city urban area
	Males	Females	Persons	
New South Wales	2,302,110	2,287,446	4,589,556	2,717,069
Victoria	1,748,916	1,747,245	3,496,161	2,388,941
Queensland	919,992	903,370	1,823,362	816,987
South Australia	585,827	586,947	1,172,774	809,466
Western Australia	527,217	500,155	1,027,372	639,622
Tasmania	196,284	193,590	389,874	129,808
Northern Territory	48,159	37,360	85,519	35,281
Australian Capital Territory	73,513	70,330	143,843	140,966
Total Australia	6,402,018	6,326,443	12,728,461	7,678,140

VICTORIA—CENSUS POPULATIONS OF LOCAL GOVERNMENT AREAS, 1971

Local government area	Population, 1971 Census	Local government area	Population, 1971 Census
MELBOURNE STATISTICAL DIVISION		MELBOURNE STATISTICAL DIVISION—continued	
Altona City	30,397	Eltham Shire	24,165
Berwick Shire (part) (a)	23,471	Essendon City	57,578
Box Hill City	54,583	Fitzroy City	25,405
Brighton City	39,103	Flinders Shire	15,470
Broadmeadows City	100,878	Footscray City	57,710
Brunswick City	51,424	Frankston City	59,308
Bulla Shire	8,238	Hastings Shire	8,875
Camberwell City	98,227	Hawthorn City	37,476
Caulfield City	81,705	Healesville Shire (part) (a)	5,184
Chelsea City	26,278	Heidelberg City	67,943
Coburg City	65,428	Keilor City	55,538
Collingwood City	20,906	Kew City	32,574
Cranbourne Shire (part) (a)	12,460	Knox City	56,778
Croydon City	28,470	Lillydale Shire	36,029
Dandenong City	40,842	Malvern City	50,569
Diamond Valley Shire	36,250	Melbourne City	74,877
Doncaster and Templestowe City	64,298	Melton Shire	5,956

(a) See East Central Statistical Division for other part.

VICTORIA—CENSUS POPULATIONS OF LOCAL GOVERNMENT AREAS, 1971—continued

Local government area	Population, 1971 Census	Local government area	Population, 1971 Census
WIMMERA STATISTICAL DIVISION		NORTHERN STATISTICAL DIVISION—continued	
Arapiles Shire	1,925	Nathalia Shire	3,207
Avoca Shire	1,963	Numurkah Shire	5,799
Dimboola Shire	5,012	Rochester Shire	7,755
Donald Shire	2,636	Rodney Shire	12,438
Dunmunkle Shire	3,541	Shepparton City	19,409
Horsham City	11,046	Shepparton Shire	6,485
Kaniva Shire	2,153	Strathfieldsaye Shire	7,693
Kara Kara Shire	1,193	Tungamah Shire	3,139
Kowree Shire	4,794	Waranga Shire	4,327
Lowan Shire	3,487	Yarrawonga Shire	3,753
St Arnaud Town	2,775		
Stawell Town	5,826		
Stawell Shire	1,963	Total—Northern Statistical Division	171,893
Warracknabeal Shire	4,219		
Wimmera Shire	3,040		
Total—Wimmera Statistical Division	55,573		
MALLEE STATISTICAL DIVISION		NORTH EASTERN STATISTICAL DIVISION	
Birchip Shire	1,739	Beechworth Shire	4,505
Karkaroc Shire	3,725	Benalla City	8,235
Mildura City	13,190	Benalla Shire	3,323
Mildura Shire	16,720	Bright Shire	4,640
Swan Hill City	7,693	Chiltern Shire	1,399
Swan Hill Shire	12,338	Euroa Shire	4,192
Walpeup Shire	3,954	Mansfield Shire	4,230
Wycheproof Shire	4,404	Myrtleford Shire	4,431
		Omeo Shire	1,864
Total—Mallee Statistical Division	63,763	Oxley Shire	5,626
		Rutherglen Shire	2,503
		Towong Shire	3,731
		Upper Murray Shire	2,657
		Violet Town Shire	1,184
		Wangaratta City	15,535
		Wangaratta Shire	1,866
		Wodonga Shire	13,079
		Yackandandah Shire	2,971
		Total—North Eastern Statistical Division	85,971
NORTHERN STATISTICAL DIVISION		GIPPSLAND STATISTICAL DIVISION	
Bendigo City	31,972	Alberton Shire	5,794
Bet Bet Shire	1,717	Avon Shire	3,095
Charlton Shire	2,218	Bairnsdale Town	8,549
Cobram Shire	5,519	Bairnsdale Shire	3,745
Cohuna Shire	4,769	Buln Buln Shire	8,406
Deakin Shire	5,655	Maffra Shire	8,506
Eaglehawk Borough	5,364	Mirboo Shire	1,966
East Loddon Shire	1,593	Moe City	15,524
Echuca City	7,510	Morwell Shire	22,400
Gordon Shire	3,105	Narracan Shire	8,569
Goulburn Shire	1,987	Orbost Shire	6,275
Huntly Shire	2,236		
Kerang Borough	4,120		
Kerang Shire	4,925		
Korong Shire	3,217		
Kyabram Borough	5,086		
Marong Shire	6,895		

VICTORIA—CENSUS POPULATIONS OF LOCAL GOVERNMENT AREAS, 1971—*continued*

Local government area	Population, 1971 Census	Local government area	Population, 1971 Census
GIPPSLAND STATISTICAL DIVISION— <i>continued</i>		EAST CENTRAL STATISTICAL DIVISION	
Rosedale Shire	4,989	Bass Shire	3,747
Sale City	10,404	Berwick Shire (part) (a)	9,603
South Gippsland Shire	5,384	Cranbourne Shire (part) (a)	3,743
Tambo Shire	5,868	Healesville Shire (part) (a)	1,161
Traralgon City	14,624	Korumburra Shire	6,993
Traralgon Shire	1,329	Phillip Island Shire	1,691
Warragul Shire	10,017	Upper Yarra Shire	5,870
Woorayl Shire	9,227	Wonthaggi Borough	3,820
Yallourn Works Area	3,211	Not incorporated, French Island	198
Total—Gippsland Statistical Division	157,882	Total—East Central Statistical Division	36,826

(a) See Melbourne Statistical Division for other part.

VICTORIA—STATE SUMMARY

Statistical Divisions	Population, 1971 Census
Melbourne	2,497,993
West Central	161,326
North Central	62,843
Western	199,831
Wimmera	55,573
Mallee	63,763
Northern	171,893
North Eastern	85,971
Gippsland	157,882
East Central	36,826
Migratory	2,260
TOTAL VICTORIA	3,496,161

VICTORIA—ESTIMATED
POPULATION (a)

At 31 December—	Estimated population
1966	3,249,220
1967	3,301,736
1968	3,353,711
1969	3,416,826
1970	3,476,453

(a) These estimates represent a new series and replace any estimates at these dates previously published or published elsewhere in this *Year Book* and are subject to revision when final results of the 1971 Census are available.

Appendix D

PRINCIPAL EVENTS FROM 1 JULY 1970 TO 30 JUNE 1971

July 1970

- 1 The Prime Minister, the Rt Hon. J. G. Gorton, opened Melbourne's new \$50m international airport, to be officially known as Melbourne Airport, at Tullamarine.
- 7 The Treasurer, the Hon. W. McMahon, opened a \$23m plant to manufacture V8 engines at the Fishermen's Bend factory of General Motors-Holden's Pty Ltd. The Minister of Housing, the Hon. E. R. Meagher, announced that two storey town houses and villa villages will be built as alternatives to the high-rise flats built by the Housing Commission.
- 8 Victoria had a deficit of \$15.4m in the last financial year. This is the highest deficit the State has had and would have been \$25.4m without a \$10m special loan from the Commonwealth.
- 21 The Ford Motor Co. of Australia Ltd announced a \$45m expansion programme at their Broadmeadows and Geelong factories involving employment of an extra 800 persons.
- 28 The Housing Commission announced rent increases of \$1.50 a week ; pensioners will pay up to 50 cents a week more.

August 1970

- 16 A temperature of 43.5°F. was recorded at 8.30 p.m. in Melbourne, the lowest August maximum temperature on record.
- 19 The Minister for Fuel and Power, the Hon. J. C. M. Balfour, announced that work would begin soon on a natural gas pipeline from Melbourne to Geelong. The 32 mile long pipeline, to be built at an estimated cost of \$1.4m, should be finished by March 1972.
- 27 The Acting Chief Secretary, the Hon. I. W. Smith, announced that the Chief Secretary, the Hon. Sir Arthur Rylah, had arranged for the former Chief Inspector of Constabulary for England and Wales, Sir Eric St Johnston, to visit Victoria and report on the Victoria Police.
- 28 River Murray in flood.

September 1970

- 18 Demonstrators blocked some city intersections for half an hour during a Vietnam moratorium march through the city.
- 21 The Prime Minister, the Rt Hon. J. G. Gorton, opened a \$33m natural gas fractionation plant at Long Island Point, Western Port. The plant is owned jointly by the Broken Hill Proprietary Co. Ltd and Esso Standard Oil (Australia) Ltd.

October 1970

- 6 The Minister for Local Government, the Hon. R. J. Hamer, opened the \$630,000 Salmon Street overpass in Port Melbourne which crosses the West Gate Freeway and links Lorimer Street and Williamstown Road. The 700 ft long prestressed concrete bridge is the second freeway overpass in the Lower Yarra Crossing project.
Mr Hamer also announced that the State Government will preserve the environment of the Mornington Peninsula.
- 8 The Prime Minister, the Rt Hon. J. G. Gorton, announced that the Commonwealth would compensate the States for their loss of receipts duties tax.
- 15 A 384 ft, 2,000 ton section of Melbourne's West Gate Bridge, on the Footscray side of the Yarra, collapsed at 11.50 a.m., resulting in the deaths of thirty-five

- workmen. The Premier, the Hon. Sir Henry Bolte, announced an immediate Royal Commission into the disaster.
- 22 John Lysaght (Australia) Ltd was given permits by the Hastings Shire Council and Western Port Regional Planning Authority to construct a \$92m cold strip plant on approximately 160 acres of their proposed 1,600 acres of land in Hastings Shire. A wide range of conditions governing land use and noise and pollution control were imposed by the permits.
 - 23 Sir Henry Bland, former secretary to the Department of Defence and the Department of Labour and National Service, was appointed as a Board of Inquiry to make a thorough examination of Victoria's land transport, the first such examination in 36 years.
 - 27 The proposed oil pipeline from Western Port to refineries at Altona and Geelong will now be built around Port Phillip Bay, rather than underneath it.
 - 29 The Minister for Labour and National Service, the Hon. B. M. Snedden, opened a \$3.45m complex of buildings for immigrants at Springvale. The hostel can accommodate 100 persons at a time and covers an area of 18 acres.

November 1970

- 5 The Royal Commission into the West Gate Bridge disaster started hearing evidence.
- 9 The Victorian Cabinet approved the appointment of the Road Safety and Traffic Authority whose main task is to find ways to reduce the road toll.
- 12 Measures to control pollution were introduced into the Victorian Parliament by the Government.
- 13 The Victorian Apprenticeship Commission early next year is expected to introduce a revolutionary form of training in some trades based on a system of teaching modules. The system would enable apprentices who have reached higher levels of secondary schooling than the minimum to be credited with passing some modules.

December 1970

- 9 The Premier, the Hon. Sir Henry Bolte, opened the Victorian Railways' new \$14m Melbourne Yard. The yard has the first automated hump shunting system in Australia.
- 14 The Full Bench of the Arbitration Commission awarded a 6 per cent pay rise to take effect from the first pay period in January. The minimum wage was also increased by \$4, bringing it to \$46.30 in Melbourne.
- 22 Compulsory wearing of car seat belts became law in Victoria. Seat belts must be used in cars where they are fitted.
Melbourne's domestic conversion to natural gas was completed. The conversion started on 15 April 1969 and cost \$30m.

January 1971

- 21 The Western Port Regional Planning Authority refused Ampol Petroleum Ltd and H. C. Sleigh Ltd a permit to build a \$60m oil refinery at Western Port. The refinery was planned for a 750 acre site at Bittern near Hastings. The scheme would have involved taking over farm land.
- 24 A severe thunderstorm lashed Melbourne for more than an hour, causing widespread flooding, blackouts, and damage. Traffic was brought to a standstill and train and tram services were disrupted. Eighty-eight points of rain fell on Melbourne between 3 and 4 p.m.

February 1971

- 4 The South Eastern Purification Plant at Carrum was officially commissioned.
- 7 The worst flood in the history of east Gippsland caused havoc; Orbost, Genoa, and Cann River were isolated. Three hundred persons sheltered in Orbost where the Snowy River reached a height of 35 ft—8 inches higher than in the 1934 flood.
- 9 The State Government appointed the chairman of its Traffic Commission, Mr J. G. Westland, to head the new Road Safety and Traffic Authority. Victoria is the first State to establish a statutory authority to advise the Government on road safety measures.
- 10 The Premier, the Hon. Sir Henry Bolte, opened the new Mercy Maternity Hospital in East Melbourne. This is the first major teaching hospital devoted to maternal and infant care built during this century and will cater for 6,000 births per year.
- 11 East Gippsland is facing an economic crisis in the wake of the Snowy River floods. Damage has been conservatively estimated at \$2m and lost primary production over the next 12 months will cost business and farming communities at least as much again.
- 15 State Cabinet agreed to the R system of film censorship. Legislation adopting the system will go before the autumn session of Parliament.

- 23 The South Australian Premier, the Hon. D. A. Dunstan, announced that South Australia would agree to the construction of the Dartmouth Dam on the Mitta Mitta River in Victoria, providing a possible future storage at Chowilla is not specifically precluded.

March 1971

- 2 The Colonel Sir Eric St Johnston report on the Victoria Police was tabled in Parliament. The report recommended proposals estimated to cost \$45m in the next five years.
- 10 The Rt Hon. William McMahon was elected leader of the Parliamentary Liberal Party and replaced the Rt Hon. J. G. Gorton as Prime Minister of Australia.
- 11 The Victorian Minister for Health, the Hon. J. F. Rossiter, officially opened the radio doctor centre for emergency medical treatment in the metropolitan area. This service will alleviate the problem of finding a doctor after normal working hours.

April 1971

- 5 The Prime Minister, the Rt Hon. W. McMahon, granted Victoria \$12m to help alleviate the State's finances.
- 19 The Premier, the Hon. Sir Henry Bolte, opened a \$26m extension at the Altona refinery of Refineries (Australia) Pty Ltd.
- 20 The Hon. R. J. Hamer was elected Victoria's new Deputy Premier.
- 28 The Premier, the Hon. Sir Henry Bolte, announced that \$3.1m would be granted to hospitals to offset deficits.

May 1971

- 4 The State Government set out a new urban renewal policy for the Housing Commission aimed at the renovation of existing houses rather than the demolition of old buildings. The Government has appointed an Urban Renewal Advisory Committee and increased the size of the Housing Commission by two members.

June 1971

- 7 The State Minister for Transport, the Hon. V. F. Wilcox, announced that final details were being decided by the Victorian Railways and private developers on a \$100m development for Flinders Street Station.
- 9 A \$90m multi-level city project featuring twin towers of more than 37 storeys is planned for the east end of Collins Street, Melbourne. The project envisages the first attempt at multi-level street planning in Melbourne.
- 15 The State Electricity Commission announced that it would build a \$145m smogless tandem-turbine power station at Newport which will use natural gas. A building more than 50 storeys high is planned to accommodate 6,000 State public servants, and will be built near Parliament House.
- 16 The Commonwealth Government offered the States the right to levy pay-roll tax in the coming financial year.
- 20 Domestic airline operations transferred from Essendon Airport to Melbourne Airport at Tullamarine.
- 22 Construction work officially began on the Melbourne underground rail loop estimated to cost \$80m.
- 25 The State Government has decided to try out daylight saving next summer. Victorian clocks will be put ahead by one hour from 31 October 1971 until 27 February 1972.

Appendix E

SELECT BIBLIOGRAPHY OF BOOKS ABOUT VICTORIA

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Appendix F

SELECT BIBLIOGRAPHY OF BOOKS PUBLISHED IN VICTORIA

The following list of books published in Victoria during 1970-71 is intended to be neither complete nor comprehensive. Its purpose rather is to illustrate the range and diversity of subject matter contained in books published in this State, with special emphasis on historical writing about Victoria. It has been compiled in collaboration with the State Library of Victoria which receives a copy of every item published in Victoria under provisions included in the *Library Council of Victoria Act 1965*.

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Appendix G

PUBLICATIONS ISSUED BY THE VICTORIAN OFFICE, COMMONWEALTH BUREAU OF CENSUS AND STATISTICS

General

Victorian Year Book
Victorian Pocket Year Book
Victorian Monthly Statistical Review
General Statistics of Local Government Areas (irregular)

Building

Building Approvals (monthly)
Building Approvals by Local Government Areas (quarterly and annual)
Building Operations (quarterly)
Building Operations : Number of New Houses and Flats : Preliminary Estimates (quarterly)

Demography and social

Causes of Death
Demography
Demography : Preliminary Statement
Divorce
Estimated Age Distribution of the Population
Estimated Population and Dwellings by Local Government Areas
Hospital Morbidity
Industrial Accidents and Workers Compensation
Industrial Accidents : Preliminary Statement
Marriages, Births, and Deaths : Preliminary Statement
Population in Local Government Areas (Revised Intercensal Estimates)
Primary and Secondary Education
Primary and Secondary Education : Preliminary Statement
Tertiary Education

Secondary production

Secondary Production (monthly)

Finance, local government, and transport

Fire, Marine, and General Insurance
Housing Finance (quarterly)
Local Government Finance
Mortgages of Real Estate Lodged for Registration (quarterly)
Motor Vehicle Registrations (monthly)
Road Traffic Accidents Involving Casualties (quarterly and annual)

Primary production

Agriculture
Apiculture
Apples and Pears in Cool Stores (monthly : March to November)
Chicken Hatchings and Poultry Slaughtering (monthly)
Citrus Fruit Production
Fisheries (quarterly and annual)
Fruit and Vineyards
Grain and Seed Harvesters on Rural Holdings (triennial)
Grasses and Clovers Harvested for Seed
Land Utilisation and Crops
Livestock
Livestock : Preliminary Numbers
Machinery on Rural Holdings
Maize : Acreage and Production
Mining and Quarrying Operations
Oats and Barley : Acreage and Varieties
Onions : Acreage and Production
Potatoes : Acreage, Production, and Varieties
Potatoes : Estimated Acreage
Rural Industries
Tractors on Rural Holdings (triennial)
Value of Primary Production
Vegetables : Acreage and Production
Viticulture
Wheat : Acreage Survey
Wheat for Grain : Production Survey

NOTE. The above publications are issued annually except where otherwise indicated, and may be obtained on application to the Deputy Commonwealth Statistician, Melbourne:

Commonwealth Banks Building,
Cnr Elizabeth and Flinders Streets,
MELBOURNE.

Box 2796Y, G.P.O.,
MELBOURNE, VIC. 3001.
Telephone 63 0181

Appendix H

INDEX OF SPECIAL ARTICLES IN VICTORIAN YEAR BOOKS

(Commencing with new series: Volume 75, 1961)

The following is a list of special articles which appear in the new series of the *Victorian Year Book* commencing with Volume 75, 1961, up to and including the current edition. Some articles have been omitted in editions since 1961 to provide space for new material. Where an article has appeared more than once, reference is given only to its most recent appearance. The figures below indicate the year and page of the *Year Book* to which reference is made.

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JUDICIARY

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The Hon. William Kaye was appointed a Puisne Judge of the Supreme Court on 1 March 1972 in place of the Hon. Ninian Martin Stephen who had been appointed to the High Court.

Geoffrey Michael Byrne and Harold George Ogden were appointed as Judges of the County Court on 1 March and 3 May 1972, respectively.

STATE PARLIAMENT

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The Hon. Geoffrey John O'Connell, Member of the Legislative Council for the Province of Melbourne, died on 20 April 1972. Mr Reynold Arthur Clarey, Member of the Legislative Assembly for the District of Melbourne, died on 9 May 1972.

NATIONAL WAGE CASE, 1971-1972

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National Wage Case 1971-1972. The following judgments were handed down :

(a) The rates for adult males in Clause 3 of Part I of the Agricultural Implement Making Award 1936, other than the extra daily rates in classification 100 and the additional rate of \$1.60 in classification 103, were increased by \$2 per week.

(b) Sub-clause (a) of clause 3A—Minimum Wage Adult Males—of Part I of the Agricultural Implement Making Award 1936 was deleted.

(c) No adult male employee shall be paid at less than \$51.00 per week as ordinary rates of pay in respect of the ordinary hours of work prescribed by the Agricultural Implement Making Award 1936.

(d) Juniors or apprentices received prescribed percentages of the new adult male rates.

(e) The rates for adult employees in classifications (a) (i), (a) (iii), (a) (v) and (b) (i) of Clause 4 of Part II of the Metal Industry (Interim) Award 1971 was increased by \$2 per week.

(f) The variations operated from the beginning of the first pay period commencing on or after 19 May 1972 and will remain in force until 19 February 1973.

(g) Public Service rates were increased by \$2 per week (\$104 per year) from the beginning of the first day period to commence on or after 19 May 1972.

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118	LOWAN S.
119	KANIVA S.
120	KOWREE S.
121	ARAPILES S.
122	HORSHAM, CITY OF
123	WIMMERA S.
124	DUNMUNKLE S.
125	STAWELL T.
126	KARA KARA S.
127	ST. ARNAUD T.
128	AVOCA S.
129	
130	LEXTON S.
131	BALLARAT S.
132	BALLARAT, CITY OF
133	SEBASTOPOL B.
134	GRENVILLE S.
135	RIPON S.
136	ARARAT, CITY OF
137	ARARAT S.
138	MOUNT ROUSE S.
139	DUNDAS S.
140	HAMILTON, CITY OF
141	WANNON S.
142	GLENELG S.
143	PORTLAND T.
144	PORTLAND S.
145	MINHAMITE S.
146	BELFAST S.
147	PORT FAIRY B.
148	KOROT B.
149	WARRNAMBOOL, CITY OF
150	WARRNAMBOOL S.
151	MORTLAKE S.
152	CAMPERDOWN T.
153	HEYTESBURY S.
154	OTWAY S.
155	COLAC, CITY OF
156	COLAC S.
157	WINCHELSEA S.
158	LEIGH S.
159	

WESTERN

160	GORDON S.
89	GOLBURN S.
134	GRENVILLE S.
140	HAMILTON, CITY OF
152	HAMPDEN S.
35	HEALESVILLE S.
154	HEYTESBURY S.
122	HORSHAM, CITY OF
95	HUNTLY S.
119	KANIVA S.
127	KARA MARS S.
112	KARKAROC S.
105	KERANG B.
106	KERANG S.
16	KILMORE S.
18	KOROT B.
148	KORONG S.
101	KORUMBURRA S.
42	KOWREE S.
87	KYABRAM B.
21	KYNETON S.
159	LEIGH S.
130	LEXTON S.
118	LOWAN S.
57	MAFFRA S.
28	MALDON S.
75	MANSFIELD S.
99	MANSFORD S.
25	MARYBOROUGH, CITY OF
31	MAYBOR S.
30	METCALFE S.
109	MILDURA, CITY OF
110	MILDURA S.
145	MINHAMITE S.
49	MIRROO S.
48	MOE, CITY OF
151	MORTLAKE S.
48	MORWELL S.
138	MOUNT ROUSE S.
73	MYRTLEFORD S.
45	NARRACAN S.
86	NATHALIA S.
20	NEWHAM & WOODHEAD S.
27	NESTEAD S.
6	NEWTOWN, CITY OF
85	NUMUKAH S.
62	OMEO S.
60	ORBOST S.
155	OTWAY S.
74	OXLEY S.
40	PHILLIP I. S.
147	PORT FAIRY B.

